

Standardization for Retail Facility Layout  
for Patagonia Inc.

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# **Abstract**

The purpose of this project is to create a standard layout for Patagonia retail stores. Currently, Patagonia has no standard layouts to follow when they update or open a new store; this has resulted in improper layouts and not fulfilling customers' needs. This project will develop a way for Patagonia to solve both of these problems based on statistical engineering. The outcome of this project will result in a standard way for determining the optimal layout for new or updated Patagonia retail stores while meeting the business needs of the location.

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# Introduction

The purpose of this project was to develop a method for Patagonia to determine the optimal layout of a new retail store or update an existing store. The new layouts provide for more product throughput, while paying close attention to the environmental effects that changes could cause. Currently, Patagonia has a problem with allocating adequate space for the varying departments that one of their retail stores may have. For the way operations are currently handled at Patagonia, there is no standard for department spacing and this results' in large rooms for specialty products and smaller rooms for the everyday wear that is carried. This allocation spacing error has a direct effect on the company and to the customers who shop at Patagonia retail stores.

Given the effects the current layouts have on the company and the consumers it is vital to determine a layout that will meet the needs of both. The allocation of space is important to how Patagonia stocks their floor with products; they do not want rooms to appear empty so they keep the shelves stock as best they can. This is the reason why they use larger rooms for specialty attire, even though the everyday wear is where the majority of sales occur. The optimal design layouts were generated at the department level based on historical department sales and incorporating regional selling differences of particular products. With the combination of statistical data and Patagonia's primary interest of the environment has allowed for a layout design that improves customer satisfaction, product throughput, and still minimizes Patagonia's carbon footprint.

# Background

Patagonia Inc. is a Ventura, California-based clothing company, focusing mainly on outdoor clothing. Yvon Chouinard founded it in 1972. Patagonia offers many varieties of outdoor clothing primarily marketed towards skiers, campers, surfers, hikers, rock climbers, Nordic skiers and others. Though Patagonia is considered a sport-specific apparel manufacturer, with the recent popularity of Patagonia growing some of the company's most popular and successful products are considered general apparel.

Not only is Patagonia one of the leading privately ran outdoor clothing companies, its primary focus is on helping the environment since the inception in 1972. The mission statement of Patagonia is:

*“Build the best product, cause no unnecessary harm, use business to inspire and implement solutions to the environmental crisis.”*

Patagonia commits 1% of their total sales or 10% of their profit, whichever is more, to environmental groups. The fact they donate the larger amount of money only intensifies their interest in the environment. Since 1985, when the program first started, Patagonia has donated \$25 million to over 1,000 organizations. In 2002, Yvon made the *1% for the Planet*; this group now consists of roughly 1,500 members that donate 1% of their sales to over 2,000 charities. Not only does the company donate large amounts of money to environmental charities, they offer their employees an Environmental Internship. These internships allow employees to take up to two months off with full pay and benefits to volunteer for the charity of their choice. They are so renowned for their environmental practices that Wal-Mart contacted them for insight on how to improve their supply chain. Over the last two years, Patagonia has shared its knowledge with Wal-Mart for a greener supply chain—for free. This is great for Patagonia because they are not a big enough company to make a huge impact but if when they spread their ways to companies such as Wal-Mart, for free, it shows the culture that the company is promoting.

While Patagonia donates a lot of money to environmental charities, they still have a business to run that needs to remain profitable for them to continue contributing to charities. Within their company, they do many things to ensure they are respecting the land. In 2008,

Patagonia won the 'Eco Brand of the Year' award at the Volvo Eco-Design Forum during the ISPO Trade Show in Munich. Earlier in the year Patagonia set a goal to make all of its' clothing recyclable by fall of 2010; however in their most recent holiday catalog they stated that they will not reach this goal until fall of 2011. Patagonia also demonstrates their environmental consciousness in the design and construction of their facilities. The Reno Nevada Sales Center (warehouse) is a great example of Patagonia consciously designing facilities; the warehouse is certified by LEED with Gold certification. In the next section, many Industrial Engineering aspects are discussed and provide the fundamentals for the design of optimal store layouts that meet Patagonia's business standards as well as fulfilling the needs of the customer.

# Literature Review

## Company Culture

While developing ideas for Patagonia Inc. (PI), I had to pay close attention the company's culture and unique operation practices. Yvon Chouinard started his first company Chouinard Equipment (becomes PI) in the late 1950's producing rock-climbing equipment and in 1964 he produced his first mail-order catalogue, a one-page mimeographed sheet containing advice not to expect fast delivery during rock climbing season [9]. The fact that Yvon declares that you should expect slower delivery during rock climbing months shows that he was not conceived by making money with his company but providing a product for a specific customer.

In 2001, Yvon cofounded *1% for our Planet*, a group of businesses that contribute at least 1 percent of their net annual sales to groups on a list of researched and approved environmental organizations [9]. The fact that this donation was based on sales and not on profit shows Yvon's dedication to protecting our environment. Yvon is a man that would rather explore nature than sit at a desk doing business work and the designs of his products are based on that philosophy. PI has employees whose job is to test their products before they reach the market. I do not mean that they go a lab room and test the product; they go on camping trips to test these products in the environment that they are meant for and within that they think of ways that it could be improved to better suit the environment [9]. This overall gives me a perspective of how Yvon expects the company to operate and the decisions I make must reflect his operating goals.

## Store Design

The store layout is only best if it is optimizing its space. While taking into account customer traffic patterns, merchandise displays, and permanent structures like aisles and fixtures. These constraints are more important when you need to follow store standards do to it being a chain [5]. When finding a location for the store there needs to be a focus on an already semi-sustainable building. This would drastically improve the process of meeting LEED standards. These semi-sustainable features include searching for buildings with solar power already implemented, with green roofs, and companies that use recycled water for flushing toilets and irrigation [11]. LEED offers two different types of certification for retail stores. LEED (for Retail New Construction), is designed for new construction, freestanding buildings where the retailer controls the shell and interior [12]. This is certification for the entire building and operations. The other, (LEED for Retail Commercial Interiors), is designed to certify a



single tenant space [12]. The layout and design should make it easy for the customers to circulate the whole store [5].

In the retail sector LEED certification is not very common. Of the nearly 1500 projects registered for certification by end of April 2007, less than 100 were retailers [10]. A Chile company, Falabella, is a retail store who is committed to sustainability. In the fall of 2007, Falabella decided to take part in the LEED-CI for Retail Volume Build Pilot Project, which seeks to make the LEED review and certification process more efficient and cost-effective for multiple projects pursuing LEED within a portfolio while maintaining LEED's rigorous quality assurance [12], becoming the first retail chain outside the U.S. to do this [10]. A Chipotle Grill in Illinois achieved the Platinum level of certification from LEED; it is the first restaurant to participate in the program to achieve the award for the Retail pilot program [10].

Although LEED certification is very important to show customers that the business focuses on the environment, but consequently it can be very costly for the company to achieve LEED certification. Just as RFID companies have to analyze the cost of becoming green. The key issue in all green building is real costs verse speculative benefits [10]. In most urban areas recycling 75 percent of construction waste is at virtually no cost for the project because these techniques are already implemented [4]. While companies who are in the rural area are not at this luxury and thus would have to pay for these improvements, only spending more money to becoming LEED certified. Vento Residence in Calgary is an apartment center located above shopping. Vento achieved a 45 percent reduction in energy by improving insulation, low-e windows, exhaust air heat recovery ventilation, and lighting occupancy features [4].

Staffing can be a difficult task, which has a high determination in the quantity of customers that enter the system. Workforce management (WFM) (also known as workforce optimization) refers to any technology or business software designed to help organizations manage their forecasting, scheduling, tracking, evaluating, and compensating employees [2]. This tool can play a vital role in a retail chain. Retailers can use WFM to leverage recent upgrades and investments in point-of-sale applications, hardware, and store systems to make employees more productive [2]. The goal is to have the right people working at the right time so that you are never overstaffed or understaffed [2].

## Inventory

Inventory control is a key factor to operating a successful retail store. Being able to locate the entire inventory is going to be important so that money is not being lost. RFID can improve the accuracy and speed of process and the traceability and the visibility of products throughout supply chains [6]. Replenishing inventory and ensuring products are always stocked and the use of RFID reduces handling and distribution cost and increases sales by reducing stock-outs [6].

RFID implementation is not cheap; it still takes a significant investment to implement it into the organization. In order to decide to integrate RFID into the supply chain, companies have to analyze the economical impact of RFID implementation [6]. Beyond the direct benefits of increases in sales and decrease in losses, indirect benefits are customer satisfaction and decrease in customer response time - which cannot be quantified but can affect direct benefits in the end [6]. One other key factor that RFID can do is lower theft occurrences. Theft can occur in several forms such as employee theft, shoplifting, and collusion when a staff member collaborates with a customer to steal products [7].

For certain companies it can be beneficial for implementing RFID technologies but with investment being so great it may be more beneficial for companies to stick to the traditional bar coding method [6]. RFID is operational improvement, which has a direct impact on the financial performance measures, such as inventory level, service level, return on investment, and working capital requirements [8].

Within the retail industry, it is very important to have a quick turn-around of the product line. You can use simulation to analyze and determine optimal way for company to stay up on their inventory. "The Textile/Clothing Technology Corporation", ([TC]<sup>2</sup>), decided that establishing their own simulation-based scheduler was a cost effective tool that could accurately account for the complexities found in small textile and apparel manufacturers [1]. For simulation scheduling it is beneficial to have all the data in external files, this enables the company to change scheduling scenarios without altering the integrity of the actual model logic [1]. A factor that comes from using external files is that it is easy for non-simulation users to use the scheduler.

Within the apparel industry, there are many variations in consumer spending habits. A schedule simulator can test system robustness to demand fluctuations, experiment with sales forecasts and product mix, determine if the company is ready for future demand, and perform "what if" analyses for unexpected customer decisions. At each location (point at which inventory will need to be replenished)

we must determine whether it is best to satisfy demand, backorder it, or reject it. In doing so, we must balance inventory-holding cost against the cost of backordering and the cost of lost sales [11]. Irregular demand can be very costly for companies so it is best to be prepared for all cases. RODA, a company in Greece that sells castors and wheels, has implemented a decision support system (DSS) that monitors their inventories in. It cooperates smoothly with the ERP system that they had implemented in 2007; the ERP system feeds the DSS with demand information and the DSS returns the recommended base stock values [7].

# What to Design

## **Determining the Need**

While taking into consideration the focus of Patagonia's business, Amanda Koper, of Patagonia, and myself developed two conceptual designs that Patagonia needs. Currently Patagonia is in the process of expanding their surf line and opening more surf oriented stores worldwide. With this expansion occurring, it is best for them to have a standard layout for the optimal functionality of a surf store. While the surf line is important for future sales, it was apparent that kids' sales were not optimized. While analyzing sales records for previous years, it is apparent in metropolitan cold climate areas that kids clothing sales are strong, but the layouts are not meeting the needs.

## **How to Meet the Need**

To determine the optimal layout for the two types of stores, I identified the current stores that have similar characteristics to these stores. For the surf store, location determined which current stores would serve as a reference for adequate spacing. Whereas for the kid's store, departmental sales for the previous years were used to see which stores had considerable impact in sales due to the kids department.

### **Surf Layout**

- Ventura (CA)
- Santa Monica (CA)
- Cardiff (CA)
- Hawaii

### **Kids Layout**

- Boston (MA)
- Westport (MA)
- Soho (NY)
- UpperWest (NY)
- Chicago (IL)

After deciding which stores to use for each layout, it was time to determine which departments would be included in each layout. This was done by seeing how each department performed and determining if it should be included in the layout. The process of choosing departments will further be discussed for each layout.

# Analysis of Facilities

## **Common Rooms**

To simplify the layouts for Patagonia it was decided that it was best to make certain rooms the exact same, these rooms include: women's restroom, men's restroom, janitor's closet, and the management office. These rooms were chosen to be the same because they have no direct link to the sales of a store.

## **Restrooms**

The restrooms in the stores are intended for employees only and will not be located on the sales floor. The project design for the restrooms includes touch less water fixtures, composting toilets, and eco-friendly urinal. With these items, Patagonia will be drastically cutting back on the use of water in their stores. Items such as air dryers, soap dispensers, and sinks are to be ADA approved and focus on preserving our planet.

## **Personnel Requirements**

For space planning purposes, 12.5 sq ft (2.5' x 5') to 15 sq ft (3' x 5') should be allowed for each toilet, 6 sq ft should be allowed for each urinal, and 6 sq ft should be allowed for each sink. The restroom must be on the ground level of the facility. In addition, there are many codified requirements for restroom facilities to meet the Americans with Disabilities Act guidelines, which include:

- Grab bar mounted 36 inches above ground
- Keep 30 inch to 48 inch clearance space for wheel chair accessibility

## **Men's Restroom**

For the complete layout of the men's restroom, refer to Appendix C Figure #2.

## **Women's Restroom**

For the complete layout of the women's restroom, refer to Appendix C Figure #3.

Table #1, Restroom Equipment

Item Description	Item Qty.	Per. Unit Price	Total Price	Supplier	Cat/ Part #
Toilets	3	\$ 2,329.000	\$ 6,987.000	envirolet	120VAC Electric
Urinal	1	\$ 430.78	\$ 430.78	SloanPlumbingParts	WES-1000
Wall Mounted Sinks	3	\$ 340.00	\$ 1,020.00	Silkeborg	SS- VVBB-422V
Partitions	3	\$ 416.00	\$ 1,248.00	allpartitions	n/a
Soap Dispenser	2	\$ 30.99	\$ 61.98	eofficedirect	GOJ274012
Air Dryer	2	\$ 395.00	\$ 790.00	prorestrooms	EXT2-M
Toilet Paper Dispenser	3	\$ 75.00	\$ 225.00	uline	H-2546
Flooring	181	\$ .93 /Sq.Ft	\$ 168.33	GreenFloors	GFCTNINENDDEE64
Grab bar	2	\$ 30.00	\$ 60.00		na
<b>Total =</b>			<b>\$ 10,991.090</b>		

## Office

Office spaces needed to accommodate two employees at a time. One of the desks will be for the store manager, while both of the assistant managers will share the other. Office spaces will include technology, furniture, and lighting to accommodate each employee. For complete layout of the office, refer to Appendix C Figure #

Table #2, Office Equipment

Item Description	Item Qty.	Per. Unit Price	Total Price	Supplier	Cat/ Part #
Desktop computer	2	\$ 999.990	\$ 1,999.98	Dell	XPS 9100
Printer/Copier/Fax	1	\$ 739.99	\$ 739.99	Dell	311CN
Desk Chair	2	\$ 239.00	\$ 478.00	officefurniture	RMT-MT9400
Shelves	1	\$ 417.00	\$ 417.00	green-furniture	TWAO-110
Desks	2	\$ 574.00	\$ 1,148.00	green-furniture	CDAO-120
Filing Cabinets	4	\$ 62.00	\$ 248.00	green-furniture	FCAO-120
Industrial Carpet	154	\$ 1.96/Sq. Ft.	\$ 301.84	GreenFloors	GFCCSHWADVDAY07
Telephone	2	\$ 99.99	\$ 199.98	Staples	KX-TS3282B
<b>Total =</b>			<b>\$ 5,532.79</b>		

## Janitors Closet

One primary concern when it came to designing the janitor's closet was keeping it in proximity to a water line. This is done by placing the closet right by the restrooms so the water line is non-issue. For the complete layout of the janitor's closet see Appendix C Figure #1.

Table #3, Janitors Closet

Item Description	Item Qty.	Per. Unit Price	Total Price	Supplier	Cat/ Part #
6' x 2' Rack	1	\$ 249.00	\$ 249.000	uline	H-1752-54
5' x 2' Rack	1	\$ 199.00	\$ 199.00	uline	H-1751-54
Janitor Sink	1	\$ 399.99	\$ 399.99	webrestarauntstore	1094136
Flooring	76	\$ .93 /Sq.Ft	\$ 70.68	GreenFloors	GFCTNINENDBRI62
Vacuum	1	\$ 299.99	\$ 299.99	Oreck	U3800HHPK
<b>Total =</b>			<b>\$ 1,218.66</b>		

## **Departments**

Patagonia separates their items of clothing into different departments depending on the purpose of the clothing. These departments include:

- Men's Lifestyle
- Women's Lifestyle
- Alpine
- Performance Baselayer
- Accessories
- Body
- Equipment
- Footwear
- Kids'
- Promo
- Ski/Snowboard
- T-Shirt
- Velocity
- Wetsuits
- Fishing

Not all of the departments are in every store, but there are select departments that should be included in any store regardless of location or specialty:

- Men's Lifestyle
- Women's Lifestyle
- Alpine

Just because an entire department will not be offered in a store does not mean that key items will not be assorted and displayed in different departments. The structure of the departments will later be discussed individually.

## **Lifestyle Department**

The Lifestyle department is by far the most important department for Patagonia. The Lifestyle department is the everyday section that Patagonia offers, this making it the most popular department. Regardless of the store, it had the most sales of any other department. It varied from store to store on if the men's or women's would do better, but the difference was negligible.

As stated earlier, this is Patagonia's everyday attire department, so a factor of designing the layout was keeping space for the smaller department items that do not require their own individual room. These departments are location specific. The departments to be included in the Lifestyle department are:

Table #4, Lifestyle Department Breakdown

Surf Store	Kids Store
Performance Baselayer	T-Shirt
Velocity	Velocity
Body	Body
	Accessories

When allocating space for the overall layout, the most space went to the Lifestyle department. Since the difference in sales was negligible from men's and women's, they were each allocated the same amount of space. For complete layouts of the Lifestyle Department, refer to:

Table #5, Lifestyle References

Appendix A	Figure #7	Men's – Kids Store
Appendix A	Figure #5	Women's – Kid's Store
Appendix B	Figure #5	Men's - Surf Store
Appendix B	Figure #7	Women's - Surf Store

## **Alpine**

The Alpine department is classified as cold weather specific attire. Across all stores, the Alpine department had significant amount of sales, requiring it to have its own room. While the attire is cold weather specific, the only other department that is shared with Alpine is the Ski/Snowboard.

Two key differences in each layout were strategically made to optimize the floor layout:

1. The Kid's Store has the Alpine department right in the middle of the store, this was specifically done because both men and women both utilize the Alpine department
2. The Surf Store has the Alpine department located in the back of the store. This was done because now customers will have to walk through the whole Surf Store to reach the Alpine department

For the complete layout of the Alpine department Surf Store refer to Appendix B Figure #8. For the complete layout of the Alpine department Kid's Store refer to Appendix A Figure #6.



## **Surf Design**

Taking into consideration all requirements for each department and the strength of relationships between them, several alternatives were generated. After narrowing down the decisions, a final layout was chosen, which can be seen in Appendix B Figure #1. While determining the final layout it was necessary to decide which departments would be included in the layout and the allocation of space for that department.

## **Equipment Department**

The equipment department consists of but not limited to backpacks, surfboards, & surf accessories. The placement of the Equipment department was chosen because:

1. It is a lure to customers. These stores are typically beach front property and this is all the items you would typically need at the beach

For the complete design of the Equipment department, refer to Appendix B Figure #2.

## **Promotional/T-Shirt Department**

The Promotional/T-Shirt department is directly targeted towards the Surf line. There are two key items:

1. Surf Videos
2. Custom designed Organic Cotton Screen-Printed T-Shirts

The location of the department was chosen for the same reason as the Equipment department. The complete layout of the department can be seen in Appendix B Figure #3.

## **Accessories Department**

The Accessories department consists of but not limited to: sunglasses, eco-totes, & reading material.

The location of the department was chosen do to the nature of the articles being carried. They are typically not the items that brought the customer to the store, but rather the items he decides to buy as he is checking out. This department is considered a waiting queue for the customers. For the complete layout of the Accessories department, refer to Appendix B Figure #4.

## **Wetsuit Department**

The Wetsuit department is growing faster than any other department. Patagonia has recently pursued the wetsuit market, and has not looked back since. Patagonia wetsuits are much warmer than standard nylon-lined suits. They offer four models– R1, R2, R3, and R4 – all available in cuts for men and women. The location was decided based on the appeal to men and women, so it should be accessible from each of these departments. For the complete Wetsuit department layout, refer to Appendix B Figure #6.

## **Fitting Rooms**

The Fitting rooms were designed following proper spacing allocations necessary for someone to change clothes. The men's fitting room is the exact same as the women's fitting room. Each room is separated by a permanent wall with a curtain as an entrance that opens to the corresponding Lifestyle department. There is a wall strategically placed to separate the Lifestyle departments from the Alpine department and this serves as coverage to the Fitting rooms. For the complete design of the Fitting Rooms refer to Appendix B Figure #9.

## **Kids Design**

The reason for having a store with a Kids department is only acceptable in metropolitan areas that endure extreme weather. This does not mean that no kids products should be carried unless they have their own room, but rather carry a small selection of kid's clothes in the stores. This was determined based on the sales of each store and then determining similarities between the stores with high kid's sales. For the complete store design, refer to Appendix A Figure # 1. Future possible sites of implementation could include:

- London, England
- Stockholm, Sweden
- Moscow, Russia

## **Performance Baselayer**

The performance Baselayer clothing is primarily designed going under your normal clothes. The biggest competitor for Patagonia in this department is Under Armour. There is a variety of different styles for all sorts of different weather. For department design, refer to Appendix A Figure 3.

## **Kids Department**

The Kid's department sells clothes for children up to the age of 11. This means that these kids are not doing their own shopping, but mom and dad are buying their clothes. We have already determined which type of cities need to have a Kid's department, now we need to determine the location of the department within the facility. The location was decided because:

1. When parents enter the store to shop for their children they will have to walk all the way to the back of the store to get to children's clothes. This will have taken them through the rest of the store seeing everything they can get for themselves

## **Fitting Rooms**

The Fitting Rooms for the Kid's Store have their own individual rooms for men and women. The rooms are each located at the end of the Lifestyle department corresponding to gender. A curtain wall separates the fitting room from the rest of the store. This provides a feel of comfort for changing clothes, and since kids shall be present, it is best to have a separate room. In each fitting room, there are three individual changing stalls, clothing rod, and folding/storage table. A permanent wall with a curtain entrance separates each stall. Provide a clothing rod and folding/storage table for the convenience of the employees. This will enable employees to handle go-backs much easier. For complete design of Fitting Rooms refer to Appendix A Figure #9 & #10.

# Financial Analysis

The analysis was calculated for the proposed surf layout facility as an indication of the viability of the project. The income and expenses for the kid's layout will not directly scale with the surf layout but can be calculated through a similar manner. For full data regarding Financial Analysis, refer to Appendix D.

## Facility Rental Costs

Facility Rental Costs are calculated using averages for the retail stores. Retail store space costs approximately \$11.00/square foot per month. The total facility is 5,456 square feet.

## Employee Wages

The employees at each store are considered non-labor employees.

### **Positions**

- Store Manager
- Assistant Store Manager
- Sales Representatives

Table #7 – Wages

Position	Wage	FICA	Medicare	FUTA	SUT	ETT	Workers Comp	Yearly Wages	Employees	Total Yearly Wages
Manager	\$ 20	6.20%	1.45%	0.80%	1.50%	0.10%	4.50%	\$ 39,008	1	\$ 39,008
Asst. Manager	\$ 14	6.20%	1.45%	0.80%	1.50%	0.10%	1.50%	\$ 26,617	2	\$ 53,234
Sales Reps	\$ 8.5	6.20%	1.45%	0.80%	1.50%	0.10%	1.50%	\$ 15,101	5	\$ 75,505
								Total Labor Wages		\$ 167,746

## Energy Costs

Several classifications must be examined to calculate energy consumption costs for one year. We must have the following information to calculate energy consumption:

- Climate Zone
- Occupancy Type
- Power Factor
- Load Factor
- Average VA/sq ft

- Cost/ kw-hour

While the surf facility will be located in coastal regions, we assumed that it would follow climate zone “T”. Our design falls under “Clothing/Shoes” occupancy type. This occupancy type has a typical power factor of 85% and load factor of 42%. The average peak VA/sq ft for “Clothing/Sales” in Climate Zone T is 5.4. To calculate an energy estimate we will assume all 5456 square feet fall into the “Clothing/Shoes” occupancy type.

$$\text{Load Factor} = \text{Average Demand (kW)} / \text{Peak Demand (kW)}$$

$$\text{Power Requirement} = 5.4 \times 5456 \text{ sq ft} = 29462.4 \text{ VA}$$

$$\text{Peak Demand} = 29462.4 \text{ VA} \times 85\% = 25.03 \text{ kW}$$

To get the average demand, multiple by 44% (the load factor):

$$\text{Average Demand} = 25.03 \text{ kW} \times 42\% = 10.52 \text{ kW}$$

To calculate the total energy, we assume a 10hr day for 300 working days per year:

$$(10 \text{ hr/day}) \times (300 \text{ days/year}) \times 10.52 \text{ kW} = 31,560 \text{ kW-h/year}$$

At \$0.16/kW-h, the cost would be:

$$(\$0.16 / \text{kW-h}) \times (31,560 \text{ kW-h/year}) = \$5,049.60 \text{ per year}$$

### **Furnishing Costs**

Furnishing costs are the costs that go into furnishing the entire store. All costs are reflective of the actual cost and can be found for purchase. All lists of products and there cost can be seen in Appendix D Figure #8.

### **Income**

The income is calculated from the average purchase price and estimated number of transactions per year. The selling price was assumed at \$100.43 based on researched data. First year production is estimated to be 8,750 transactions, 50% of full capacity, assuming that store would not be open the full year and time to gain popularity in new market. Full production in the remaining years is estimated to be 17,500 transactions.

## **Depreciation of Investments**

Depreciation is calculated using the Modified Accelerated Cost Recovery System (MACRS). All of the investments in equipment and other assets for the facility are divided into classes and depreciated using the corresponding class lives. This method is required under the United States tax code. For MACRS depreciation, each investment is categorized with a Class Life as defined by the IRS. The Class Life corresponds to a MACRS depreciation schedule that prescribes the percentage of the initial investment that can be depreciated in a given year.

## **Net Present Value (NPV)**

The Net Present Value is a calculation that adjusts all cash flows at a specified interest rate to represent the current value of the future returns from the project. A positive NPV is indicative of a good project.

## **Internal Rate of Return (IRR)**

The Internal Rate of Return (IRR) is defined as the interest rate for which the Net Present Value of the project equals zero. An IRR greater than a company's Minimum Acceptable Rate of Return (MARR) is an indicator of a good project.

# Appendix A: Kid's Store

Figure #1 – Overall Kids Store Layout

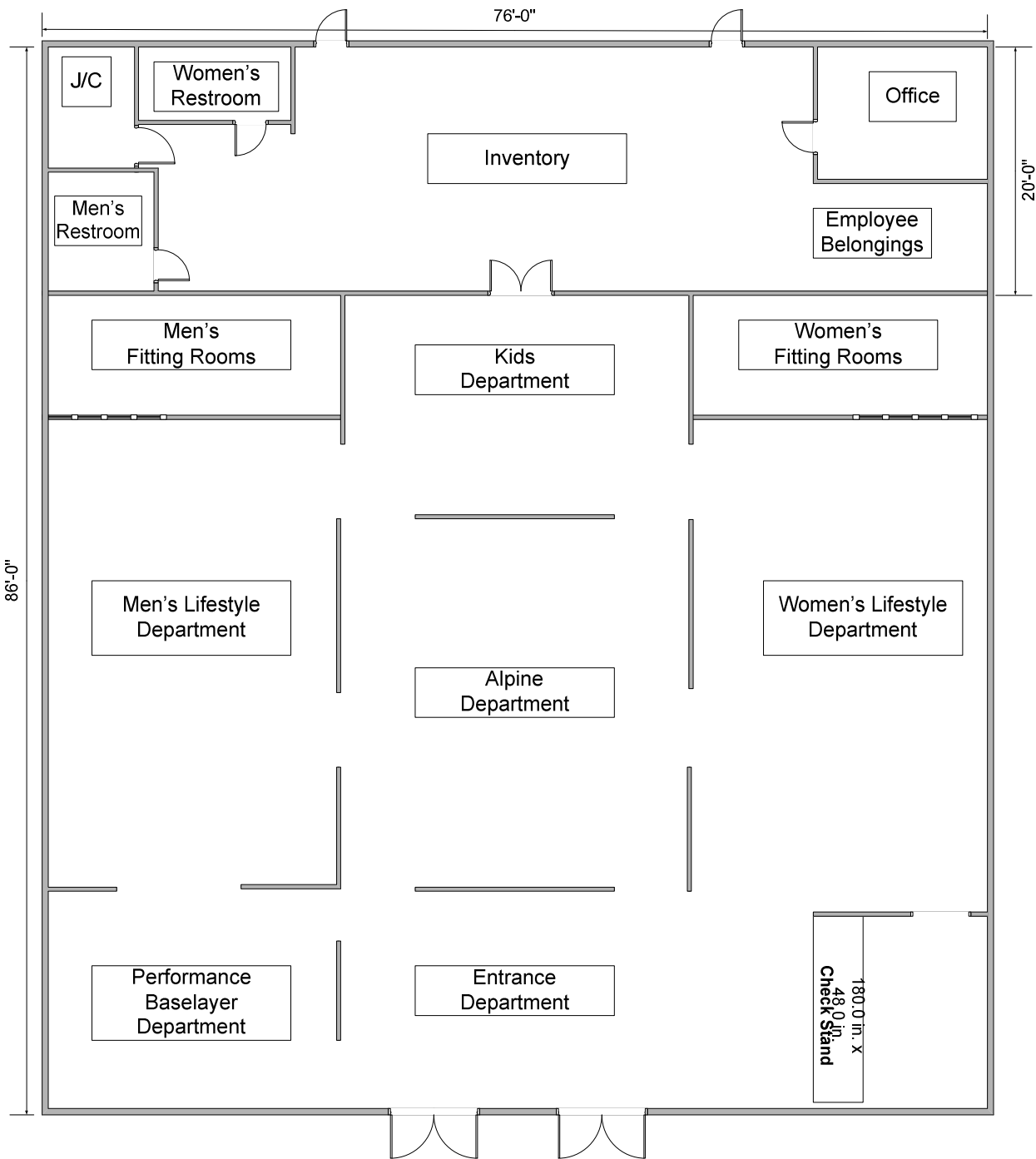


Figure #2 – Entrance

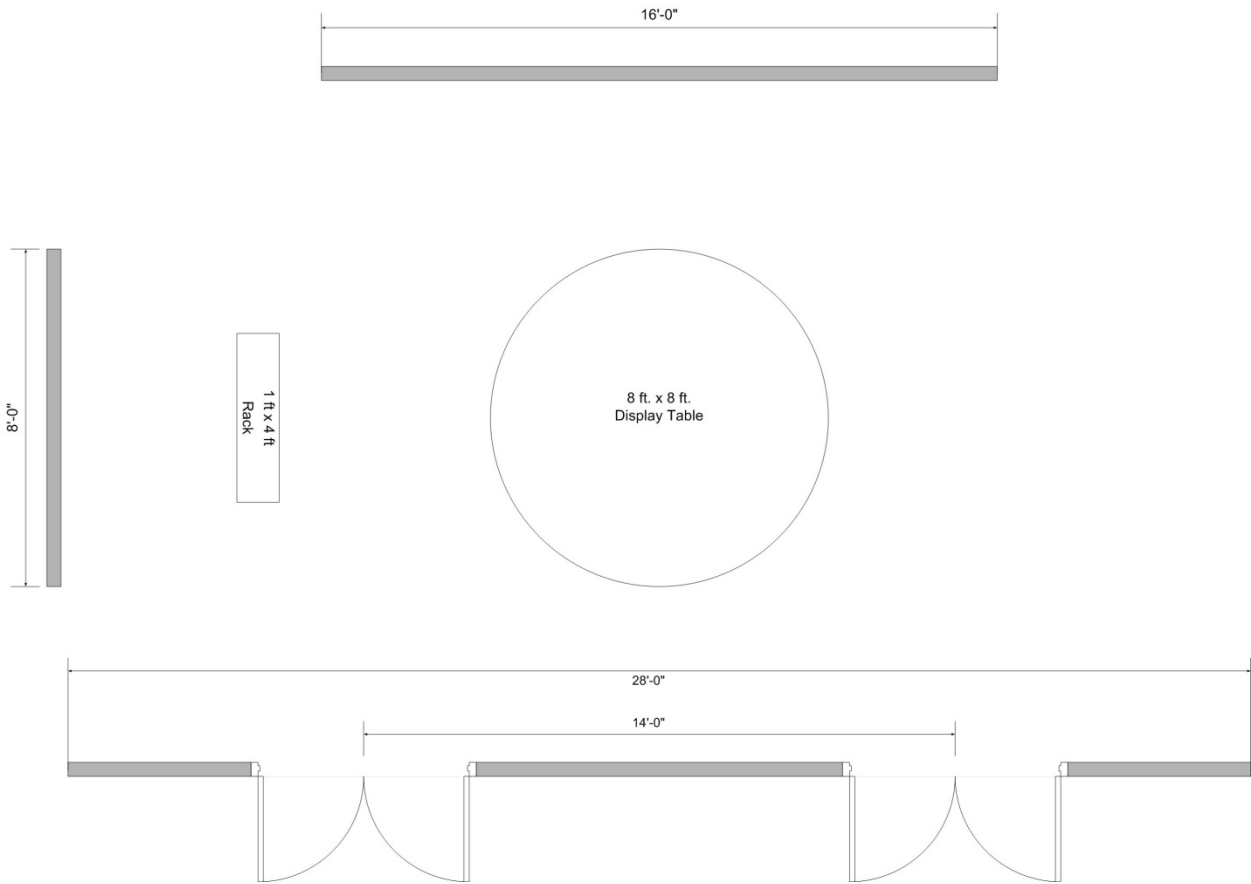




Figure #3 – Performance Baselayer

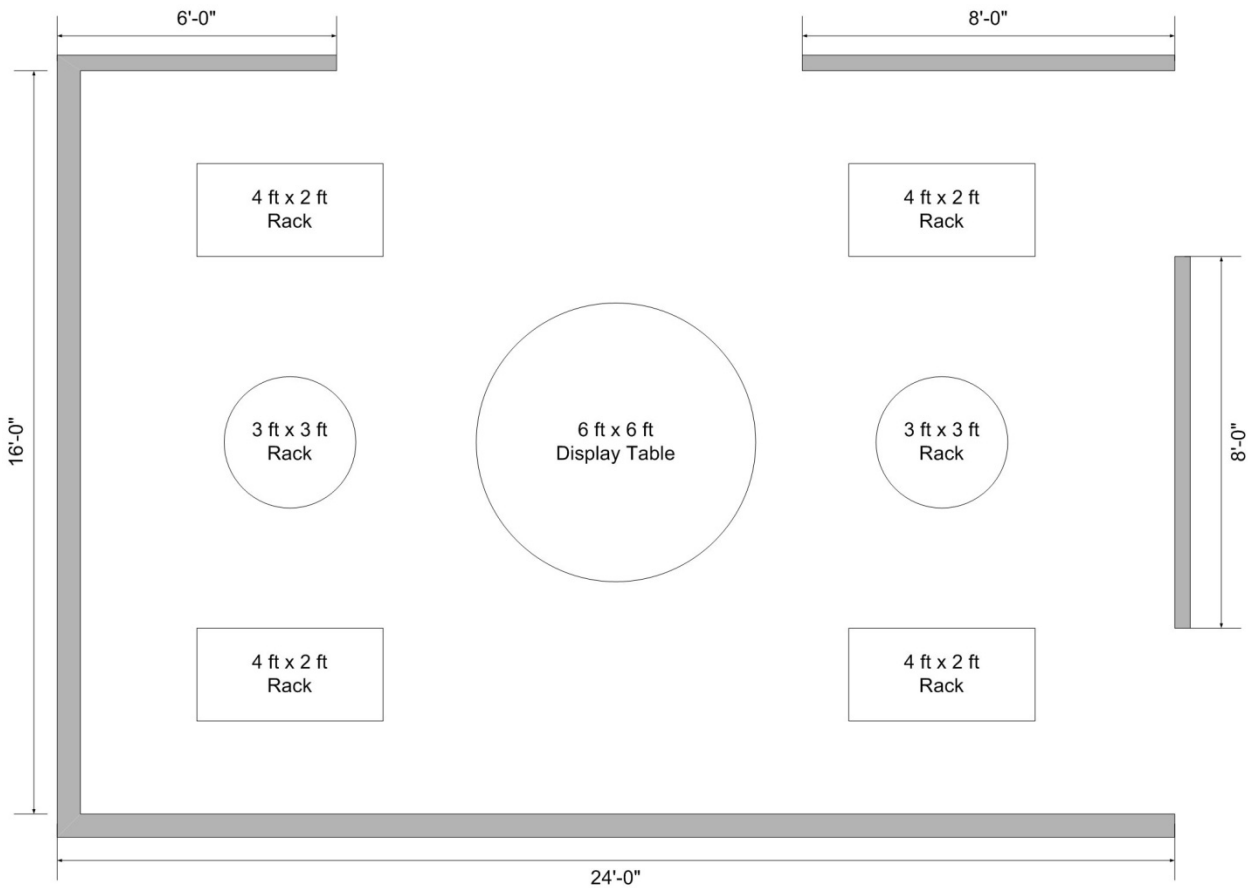


Figure #4 – Check stand

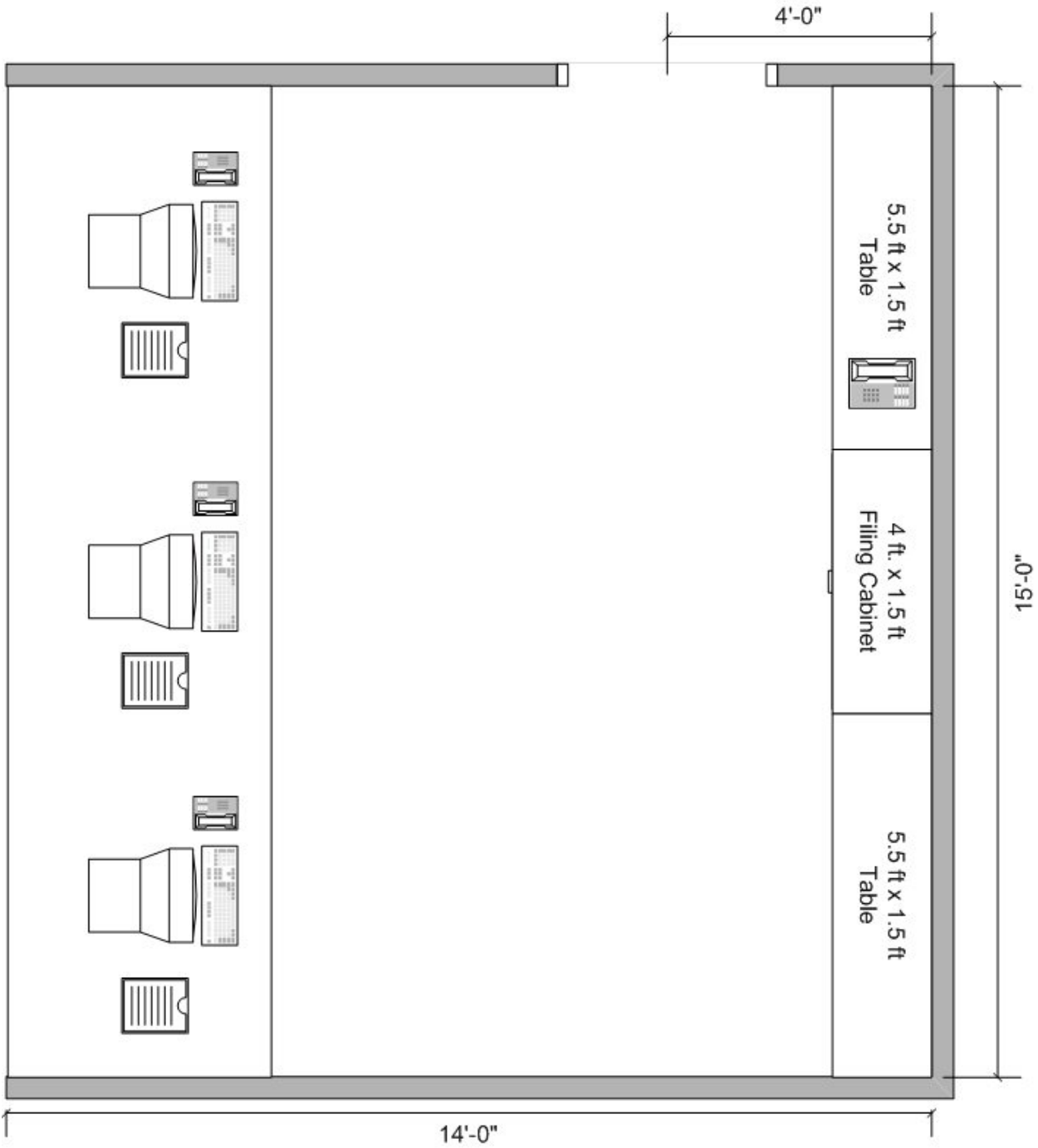


Figure #5 – Women’s Lifestyle Department

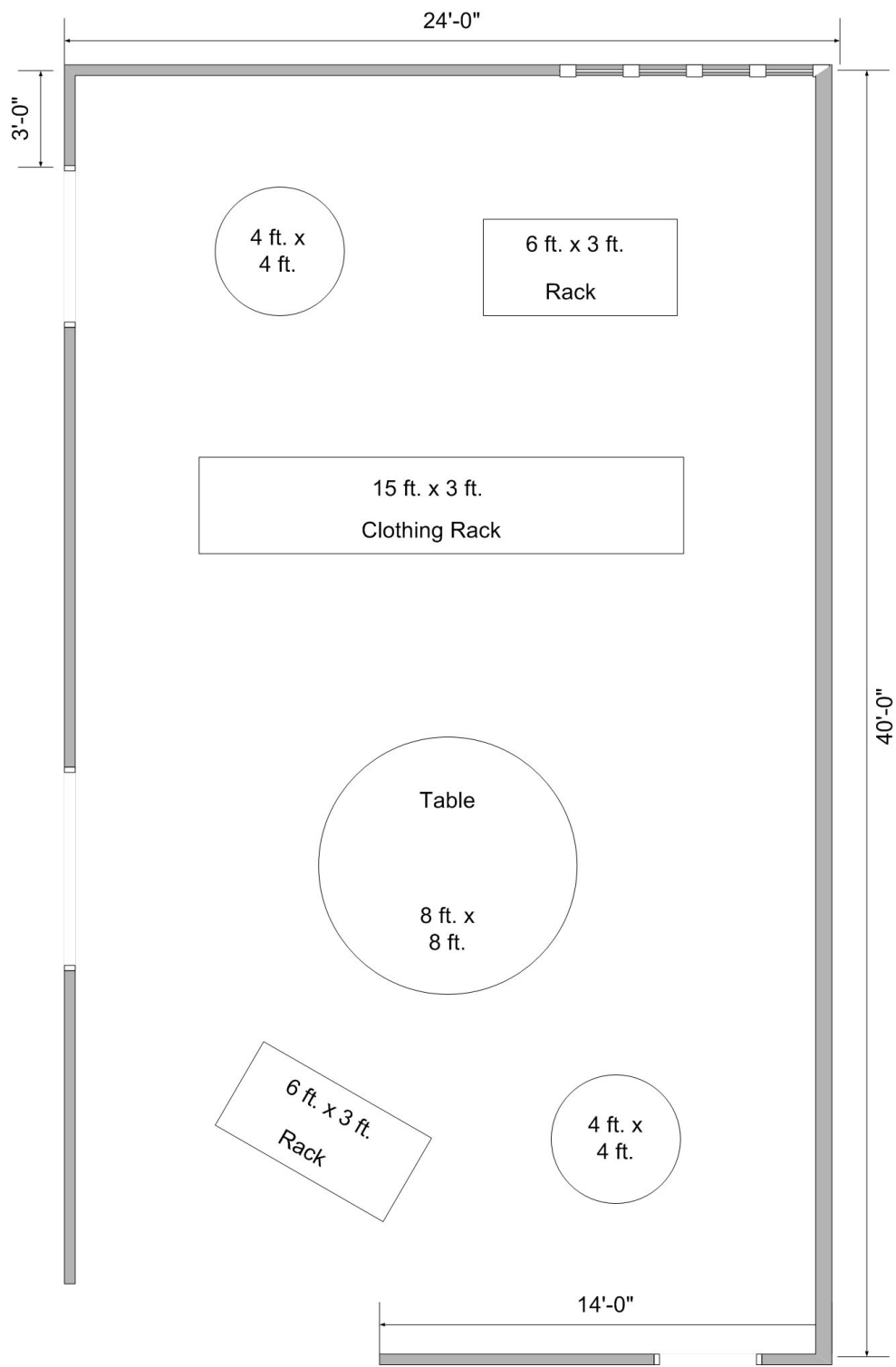
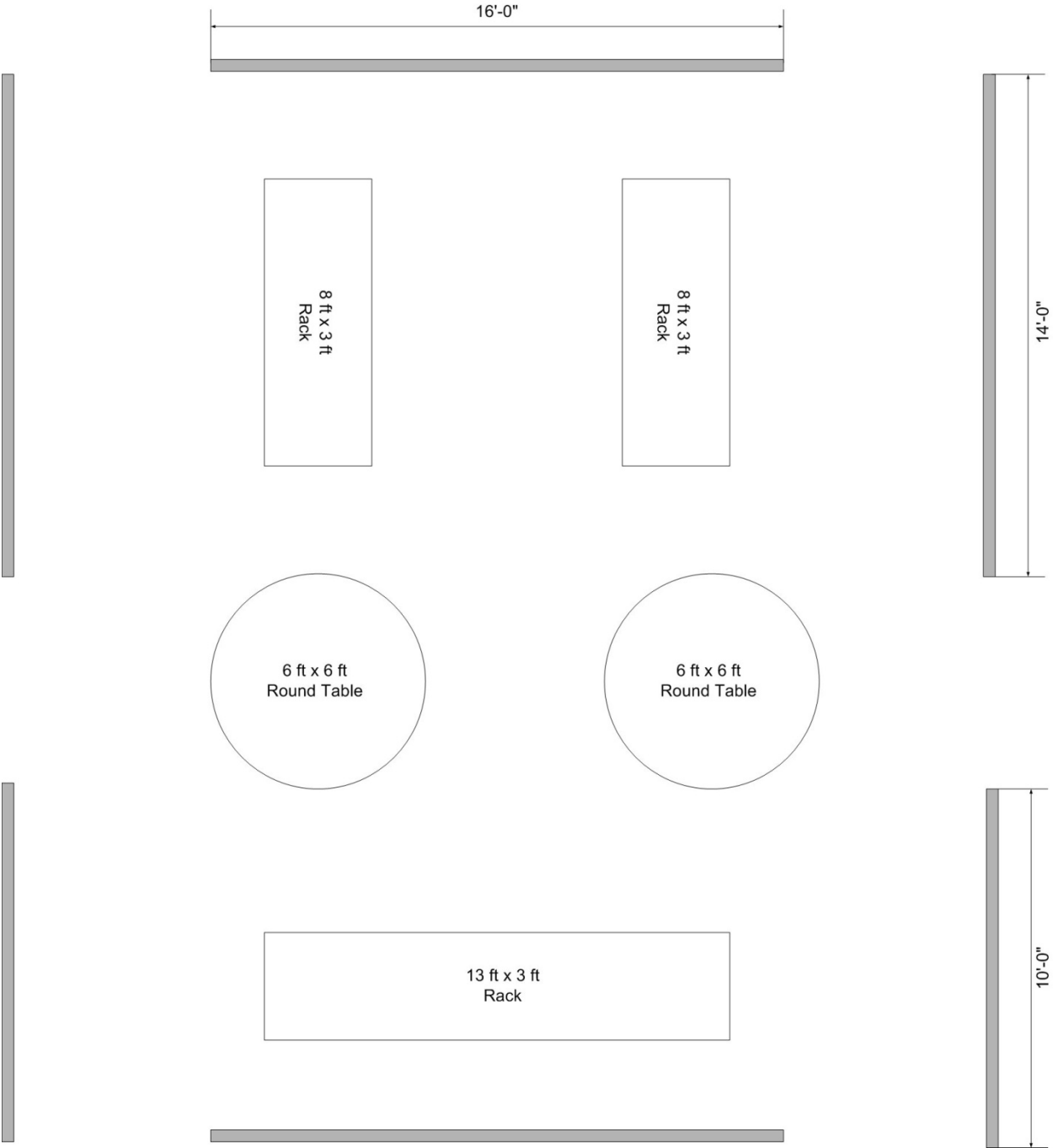


Figure #6 – Alpine Department



Figure# 7 – Men’s Lifestyle Department

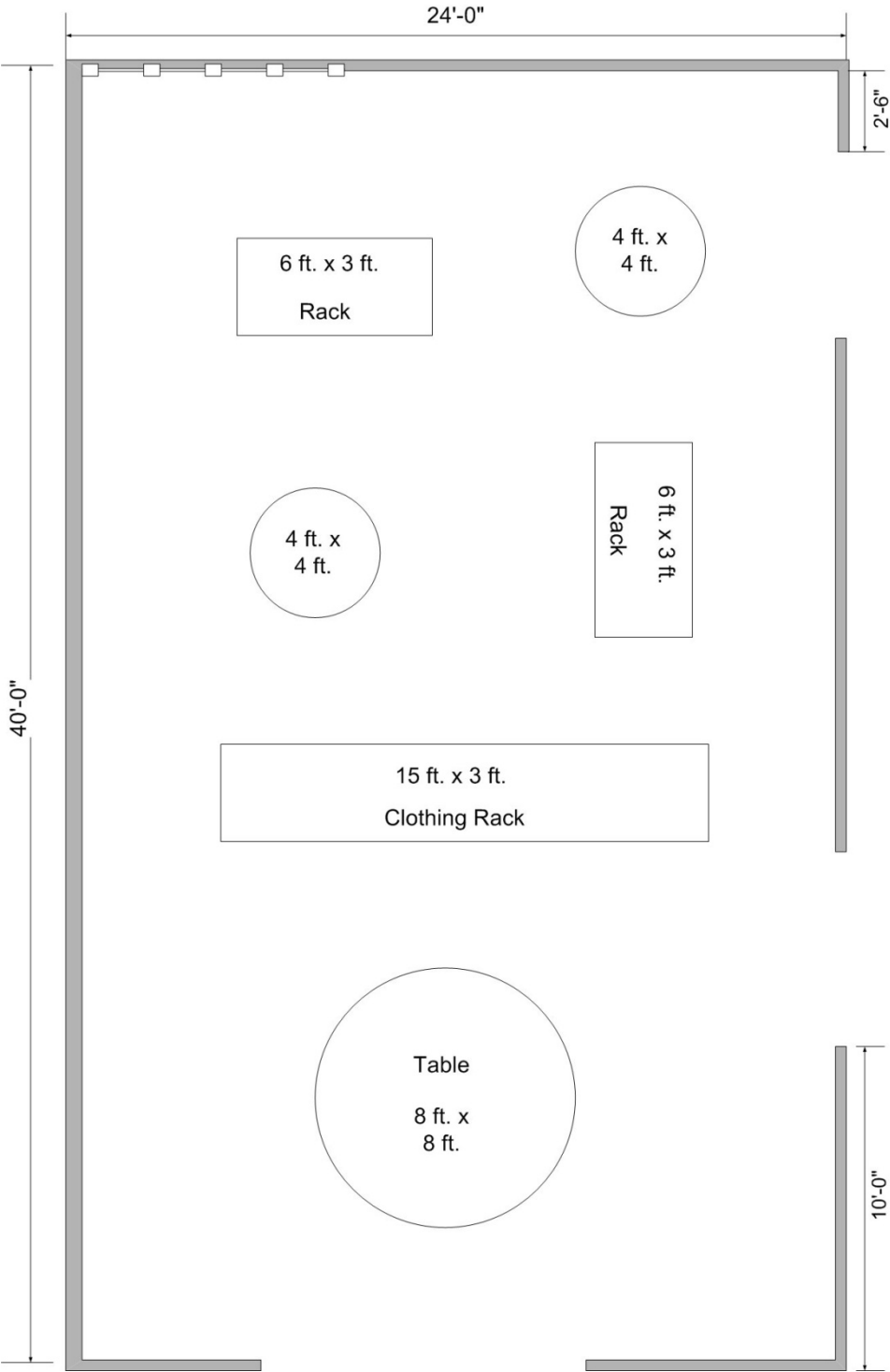


Figure #8 –Kids Department

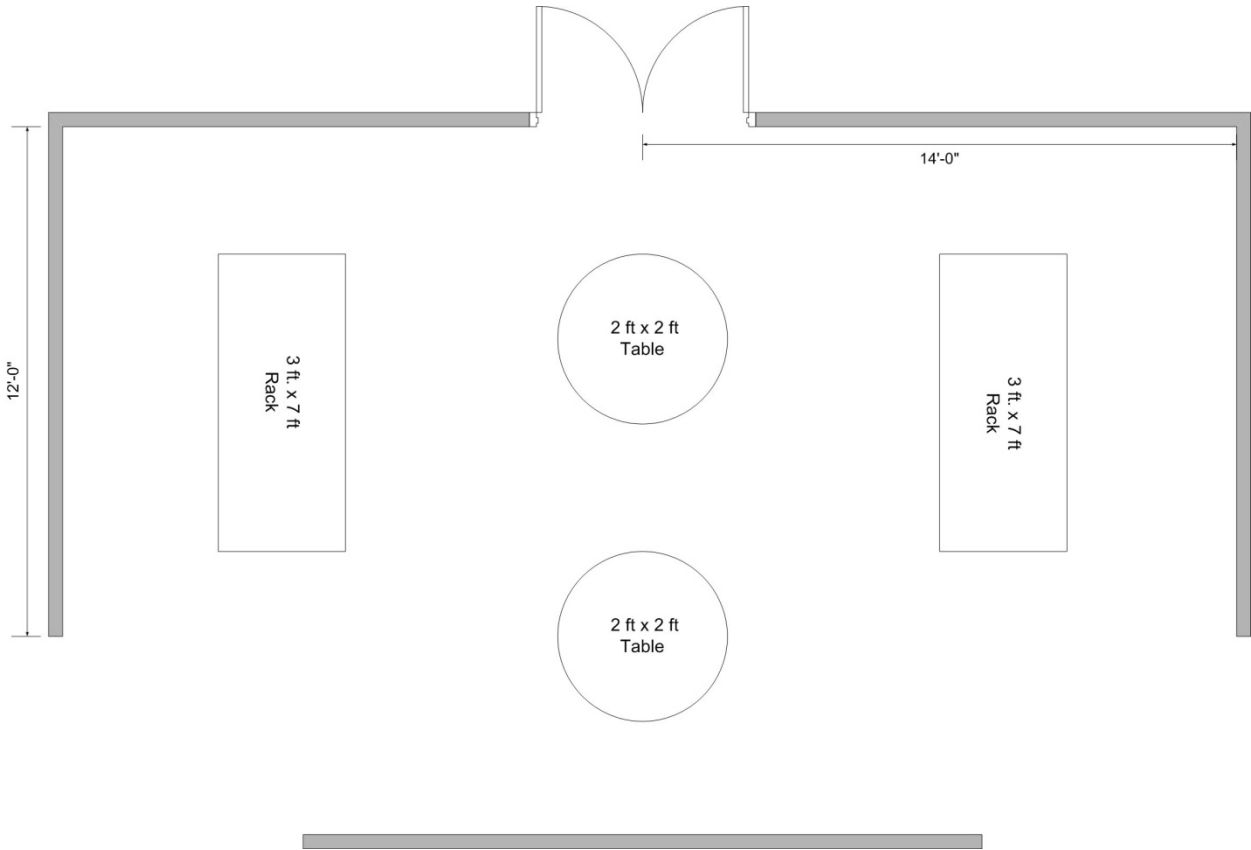


Figure #9 – Men’s Fitting Rooms

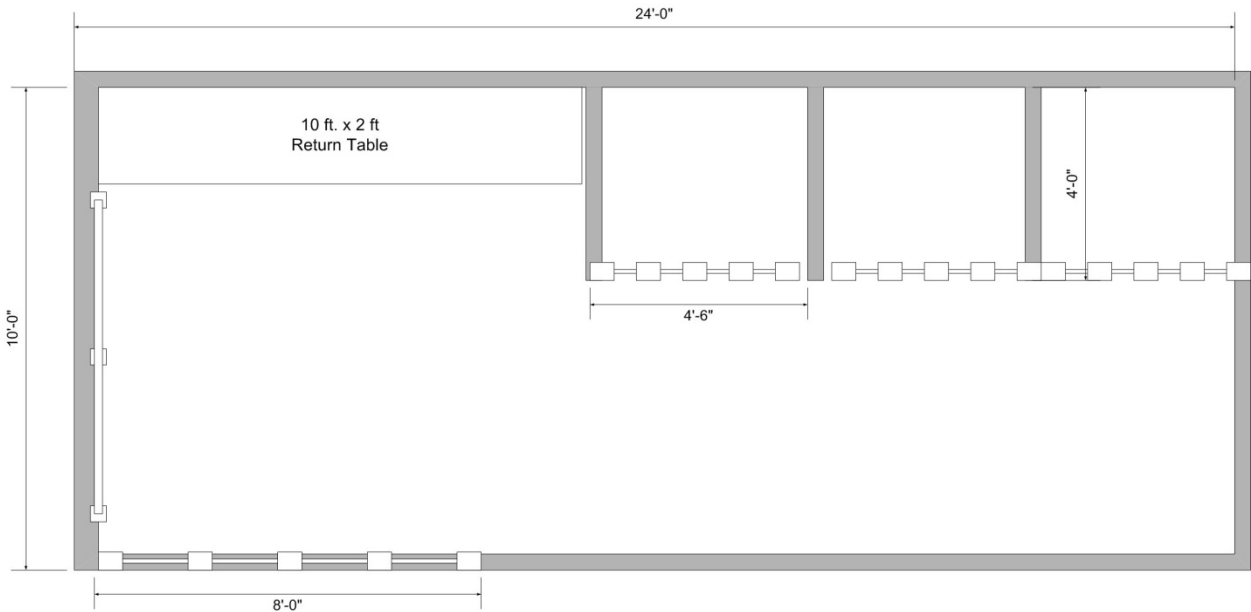


Figure #10 – Women’s Fitting Rooms

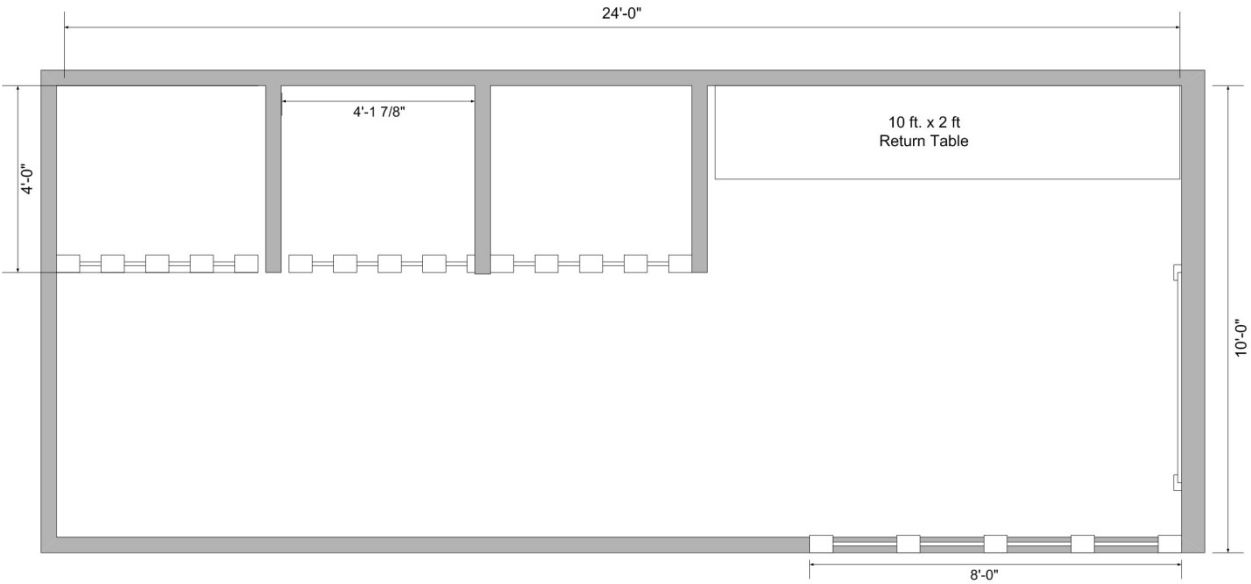


Figure #11 – Employee Belongings

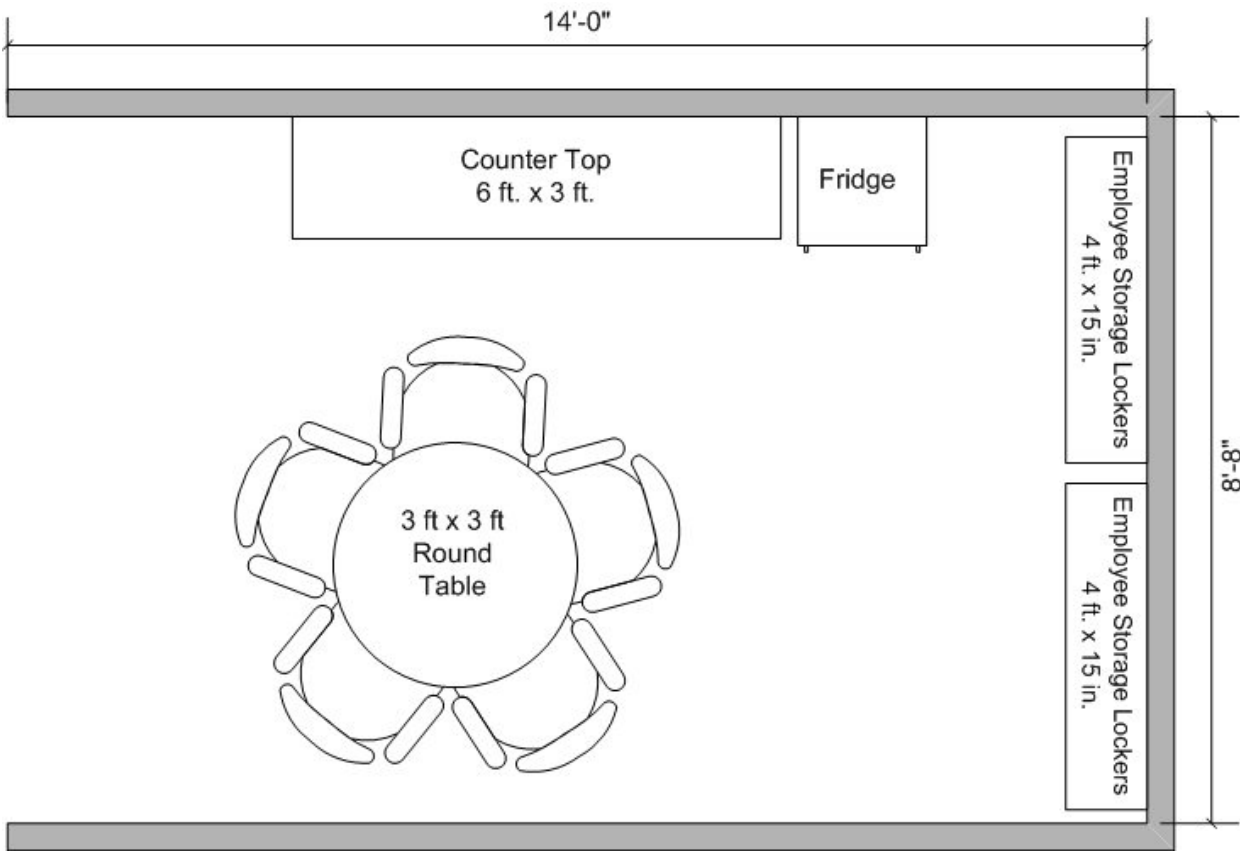
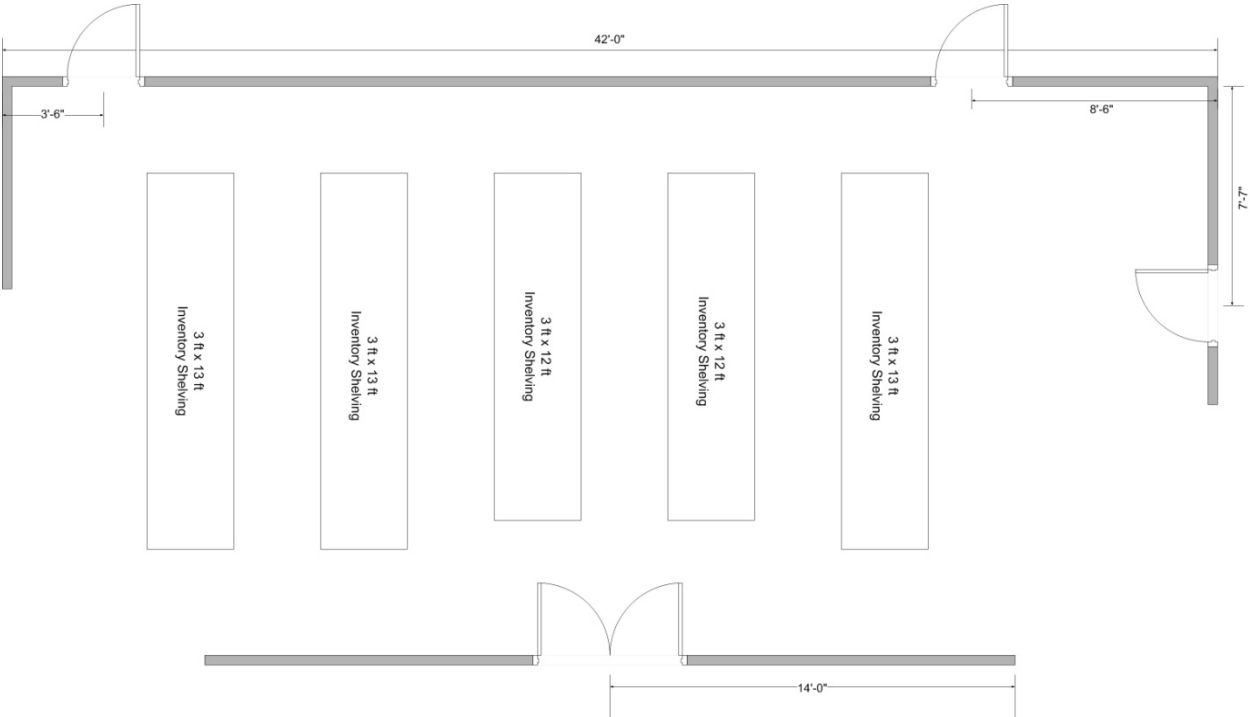




Figure #12 – Inventory



# Appendix B: Surf Store

Figure #1 – Overall Layout of Surf Store

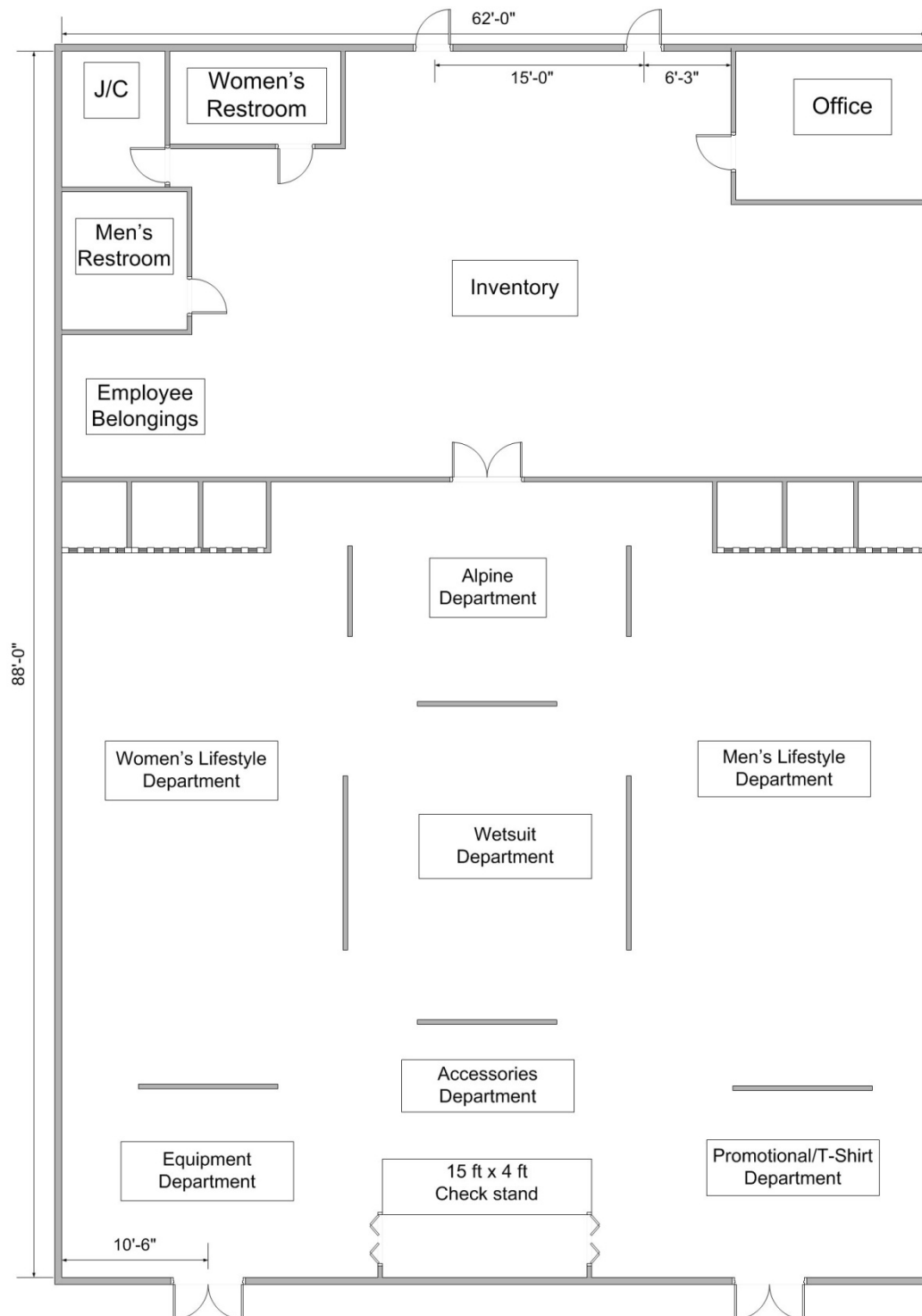


Figure #2 – Equipment Department

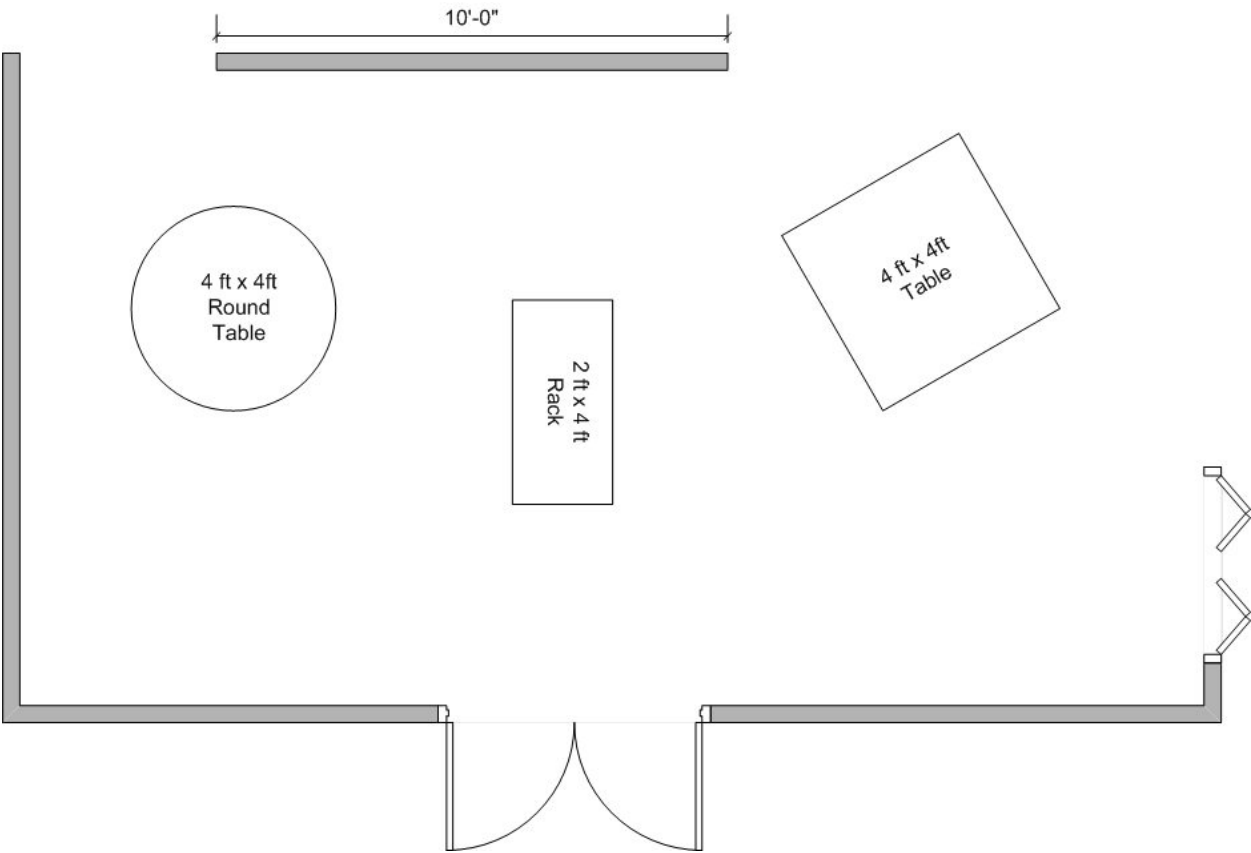


Figure #3 – Promo/T-Shirt Department

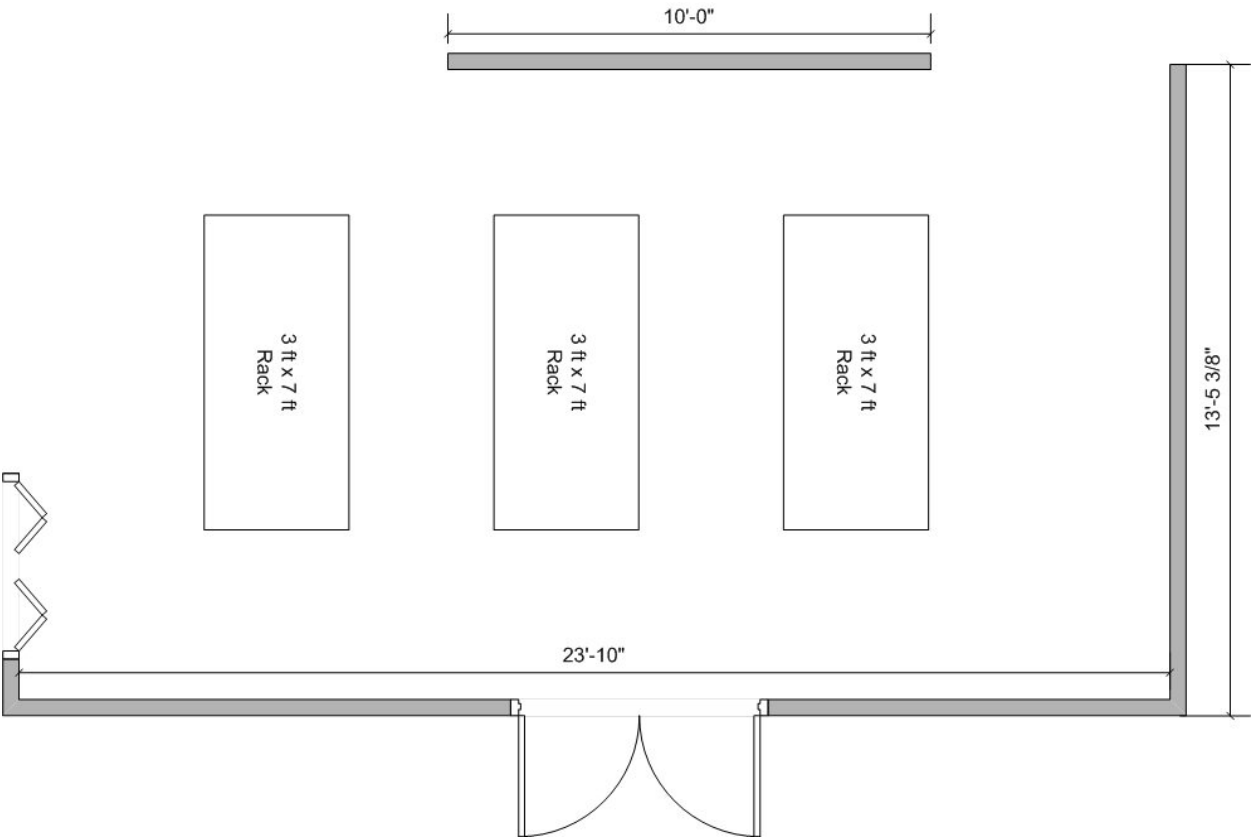


Figure #4 – Men’s Lifestyle Department

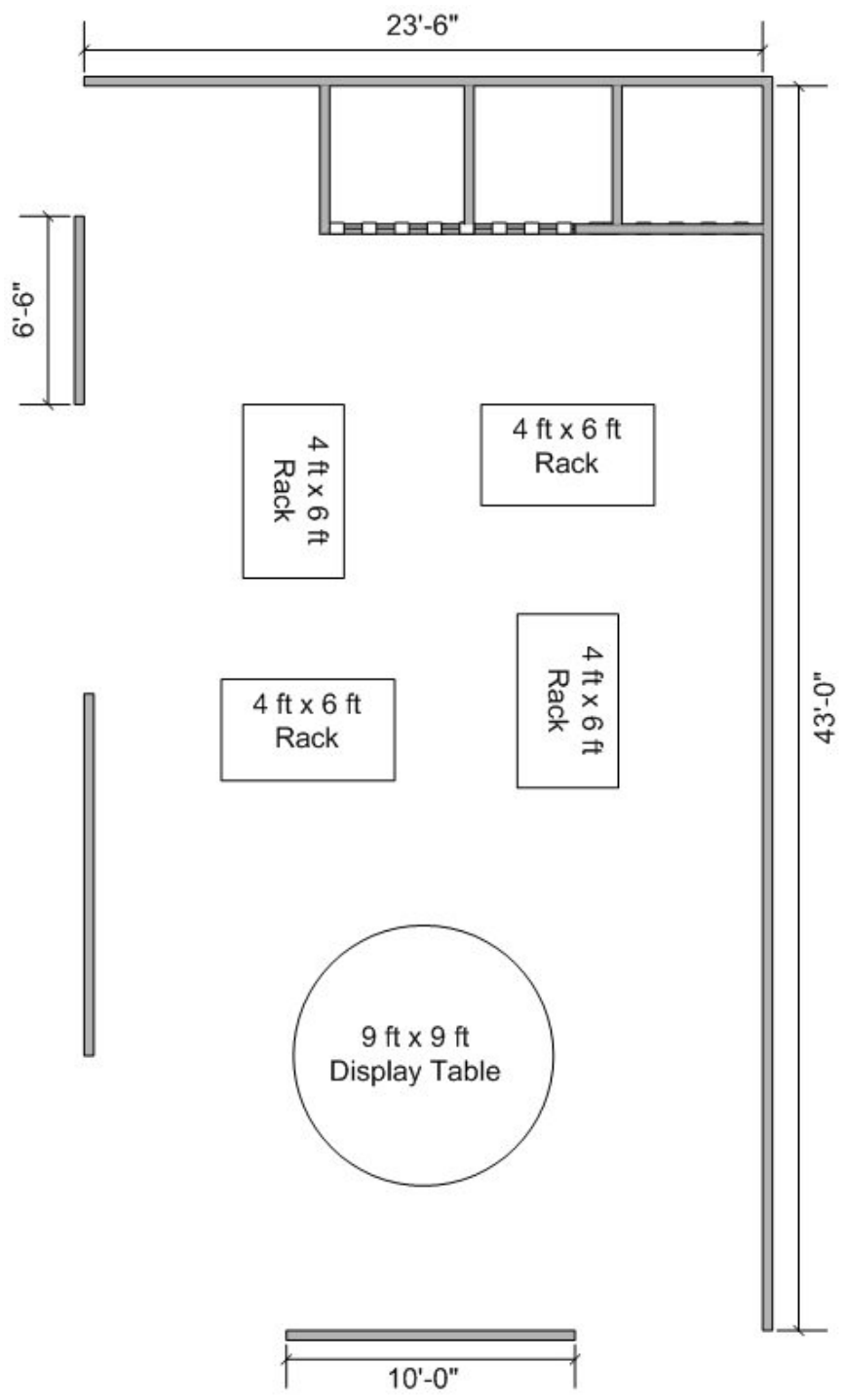


Figure #5 – Wetsuit Department

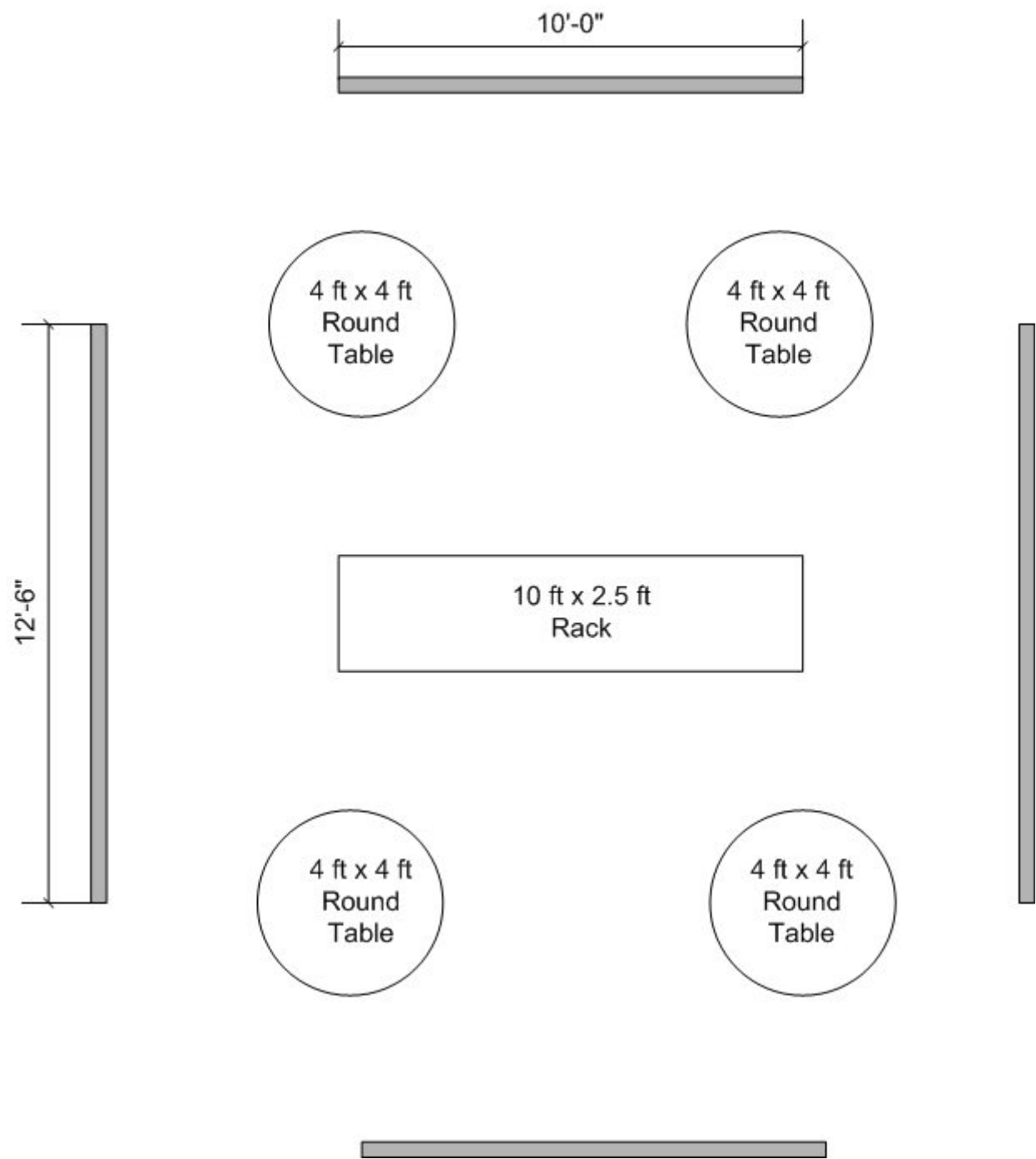


Figure #6 – Women’s Lifestyle Department

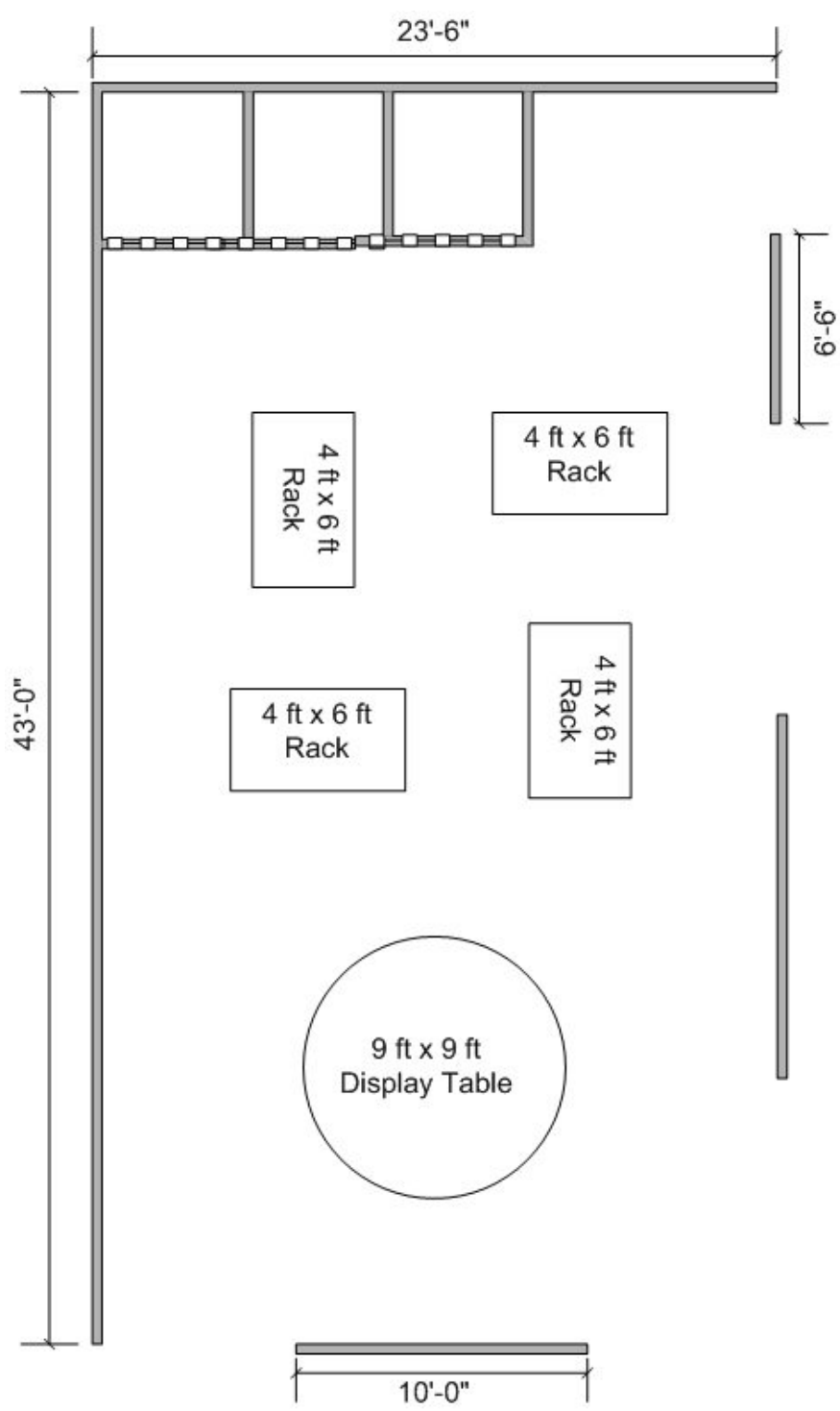


Figure #7 – Alpine Department

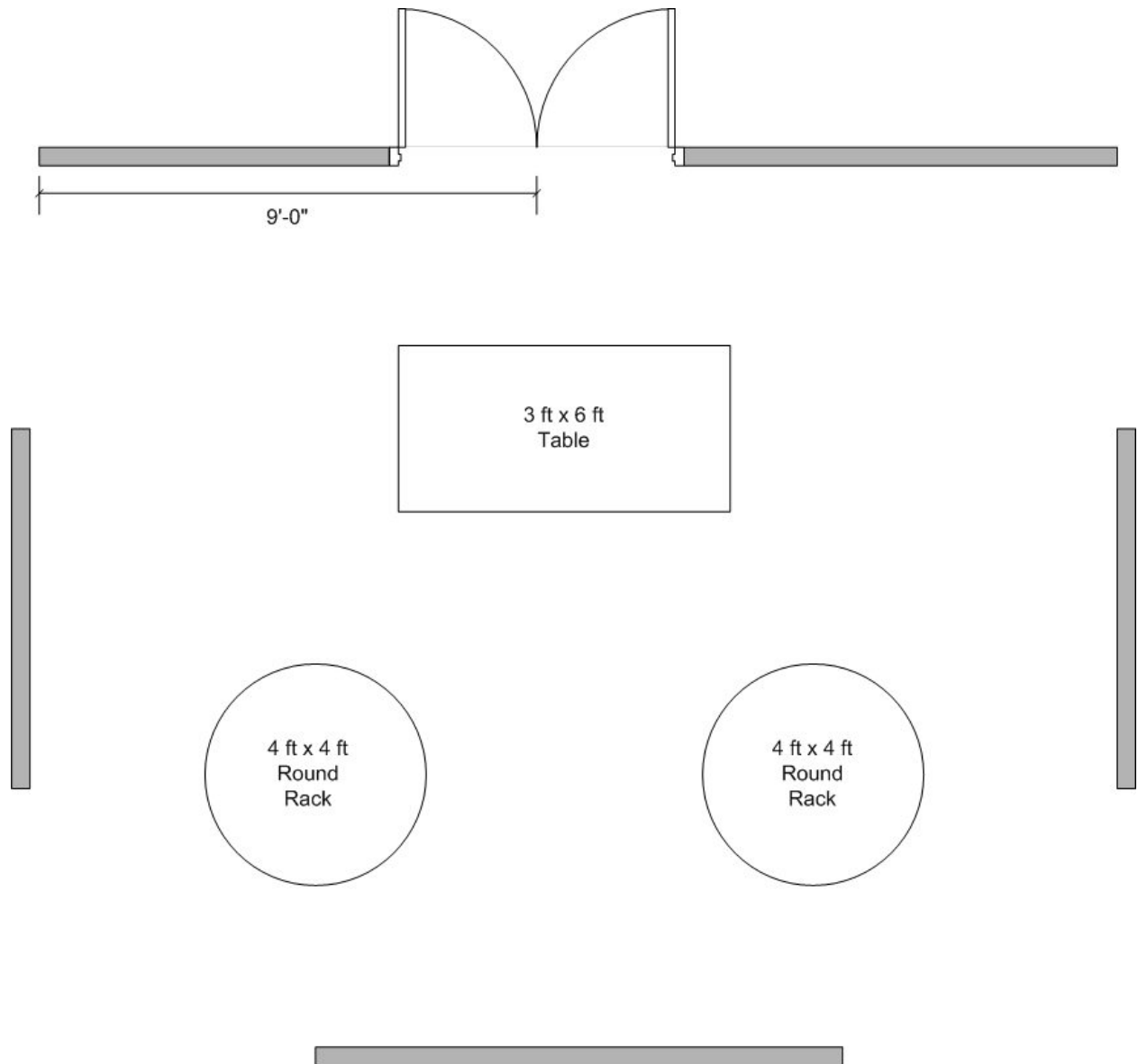


Figure #8 – Men's Fitting Rooms



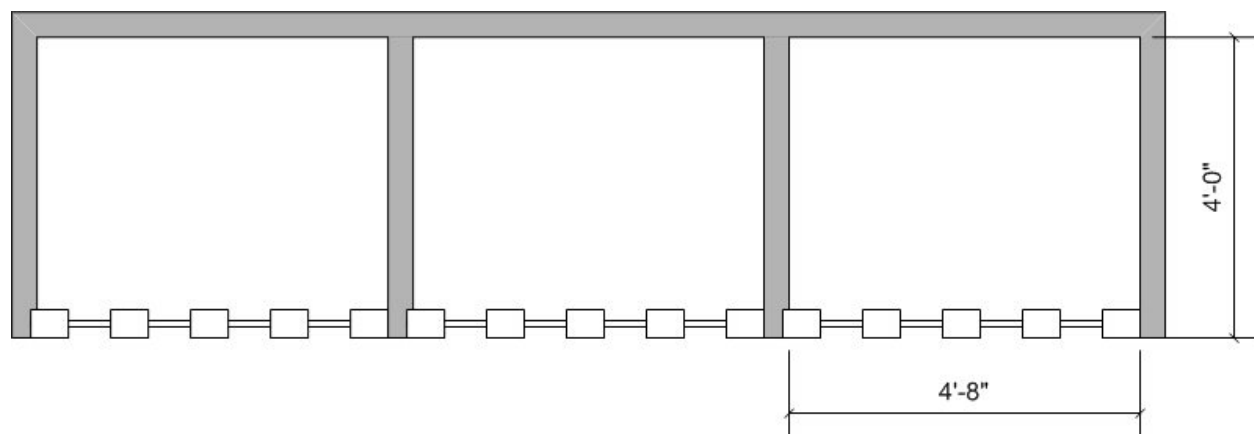


Figure #9 Women's Fitting Rooms

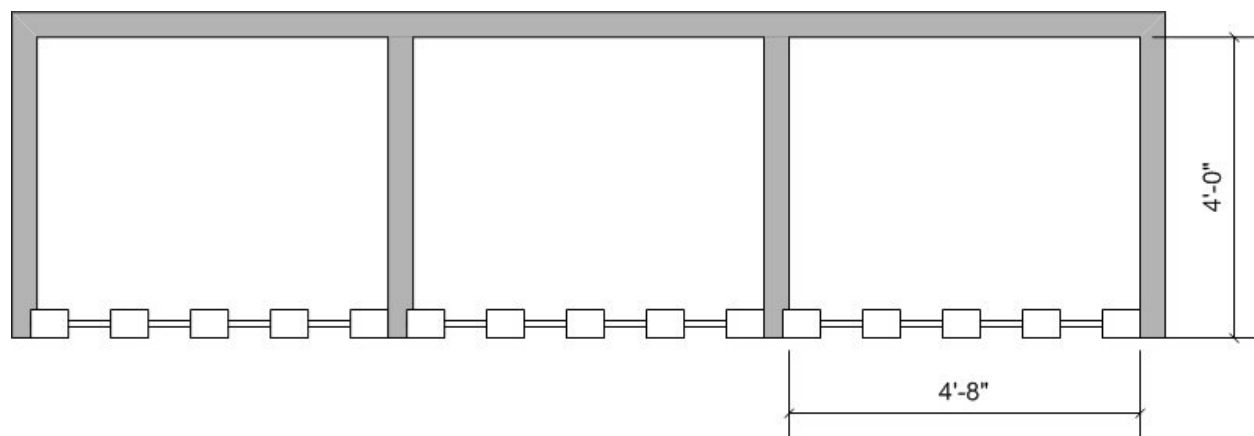


Figure #10—Employee Room

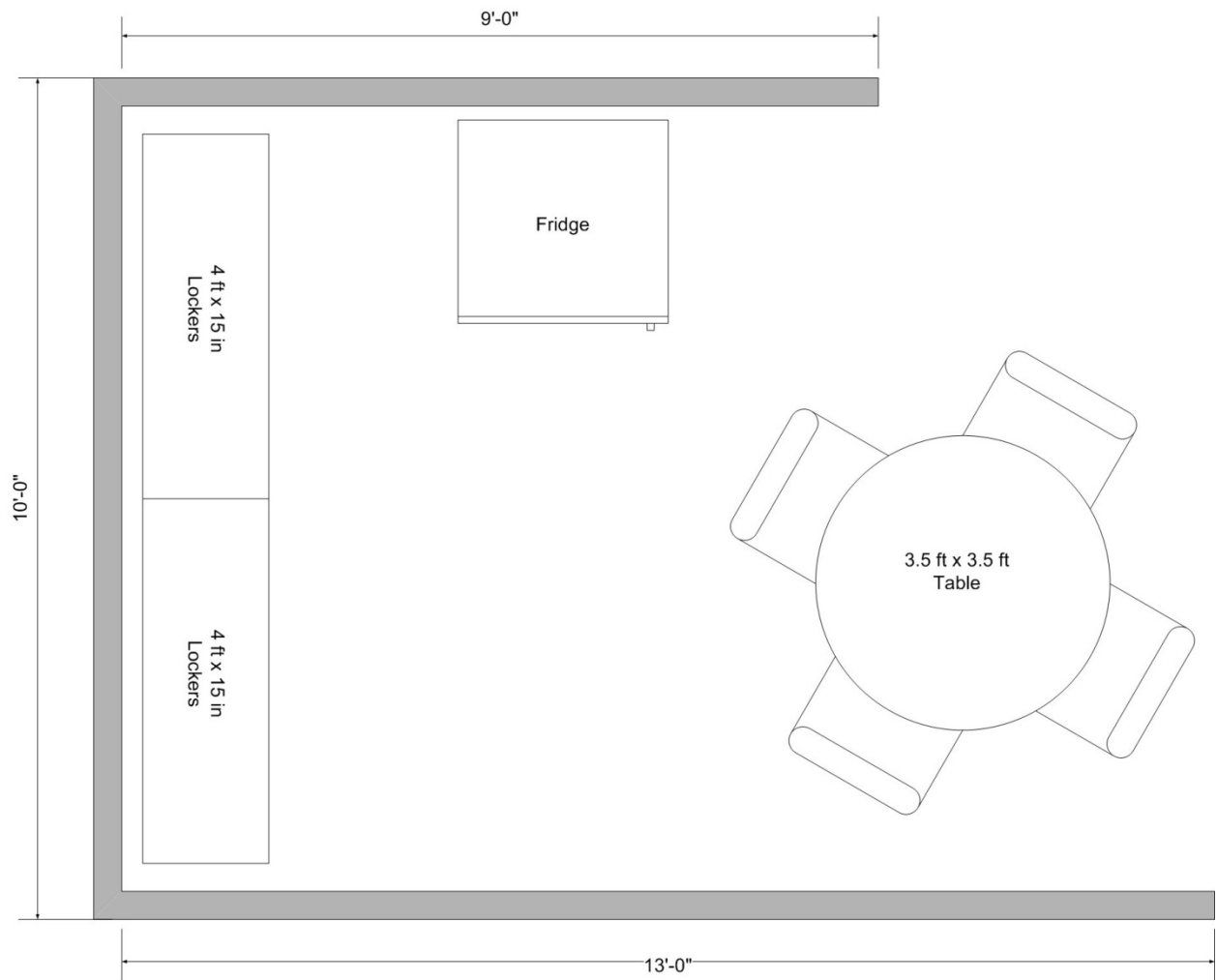
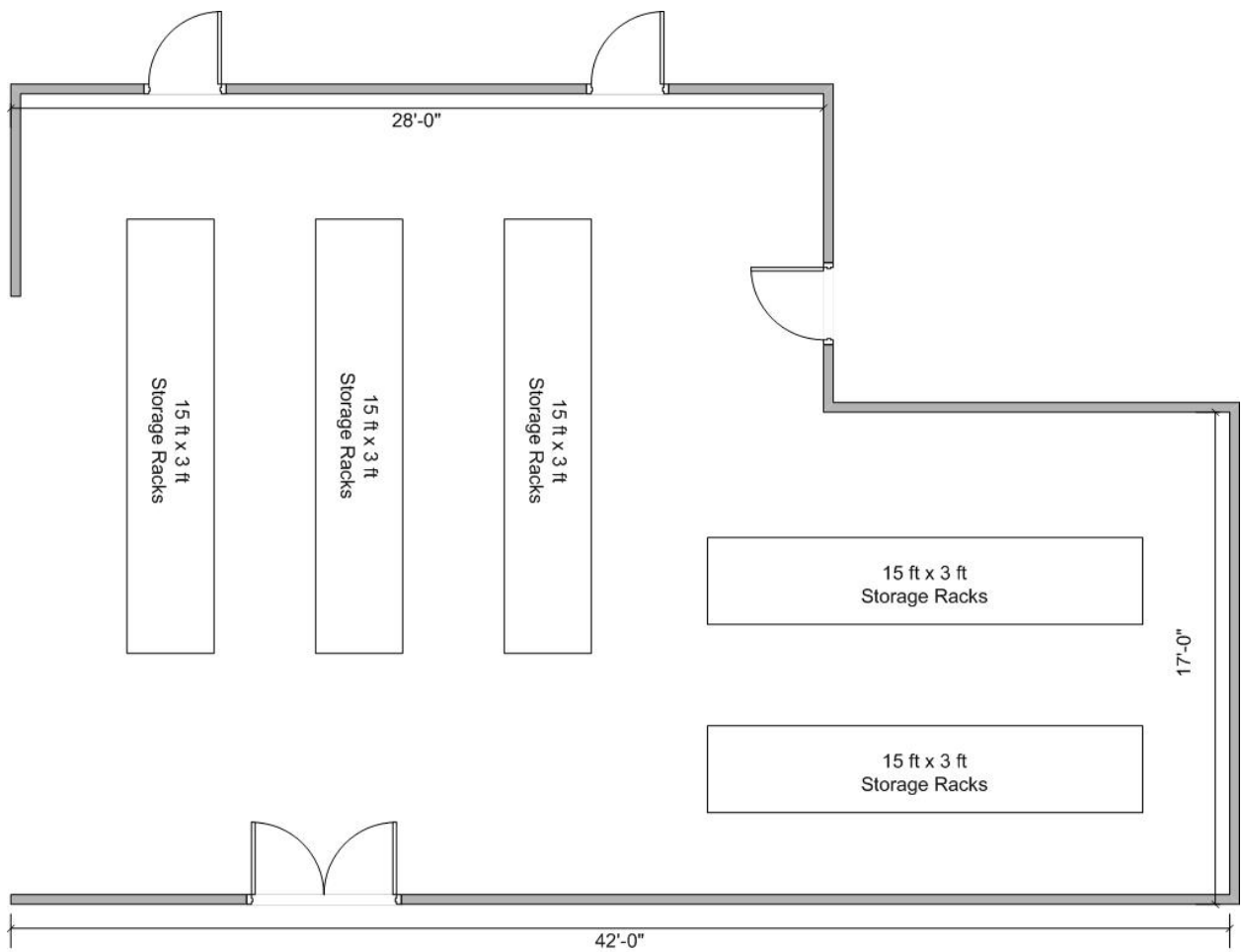


Figure #11 – Inventory



## Appendix C: Common Rooms

Figure #1 – Office

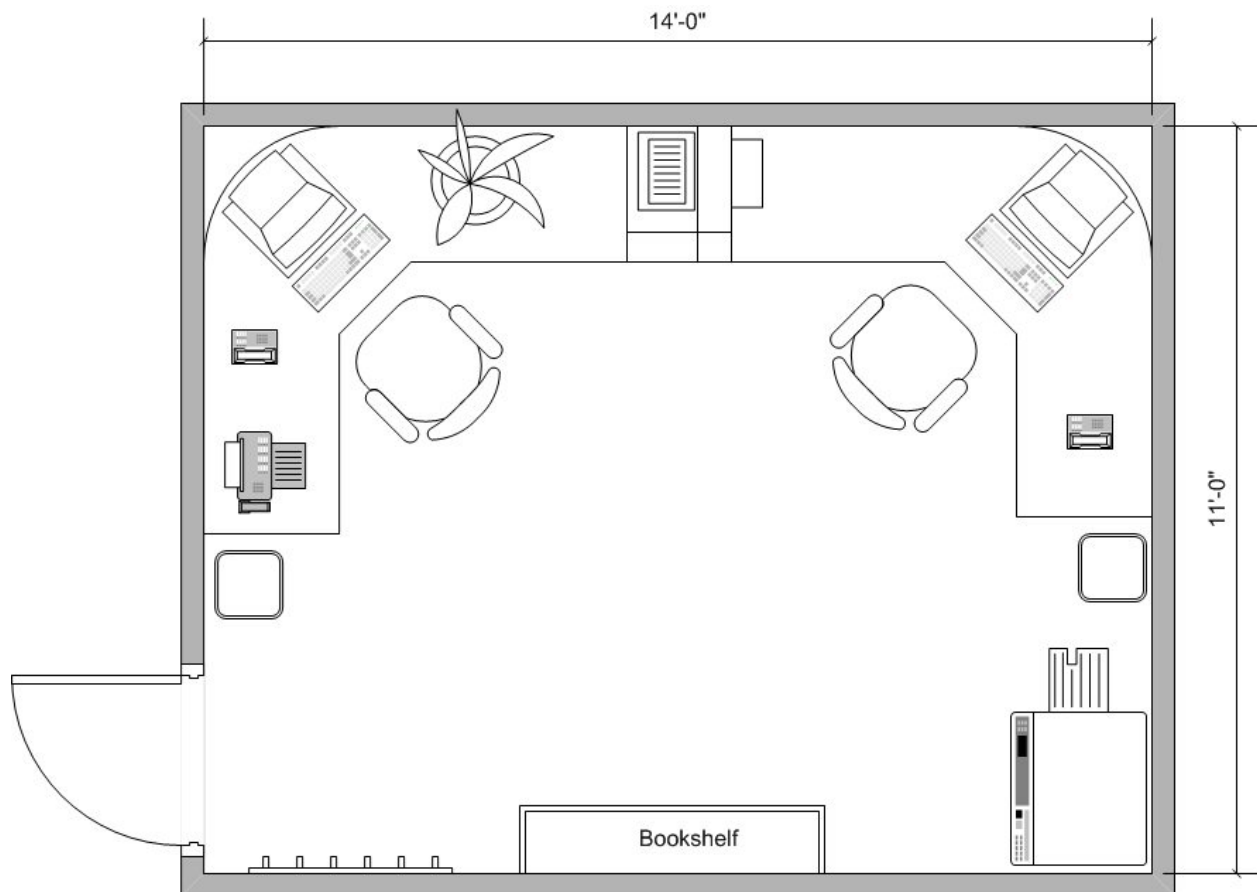
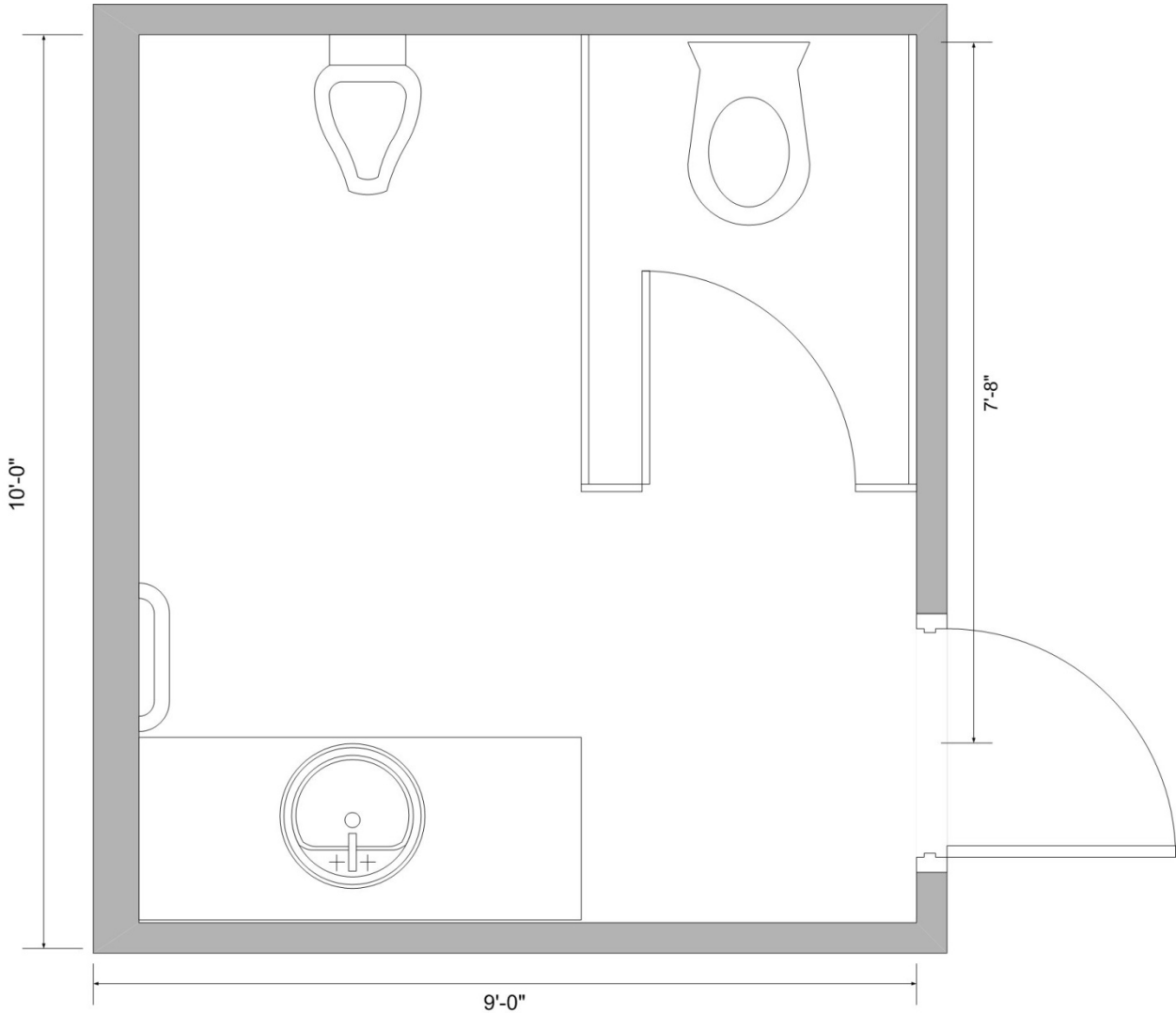


Figure #2 – Men’s Restroom



Figure#3 – Women’s Restroom

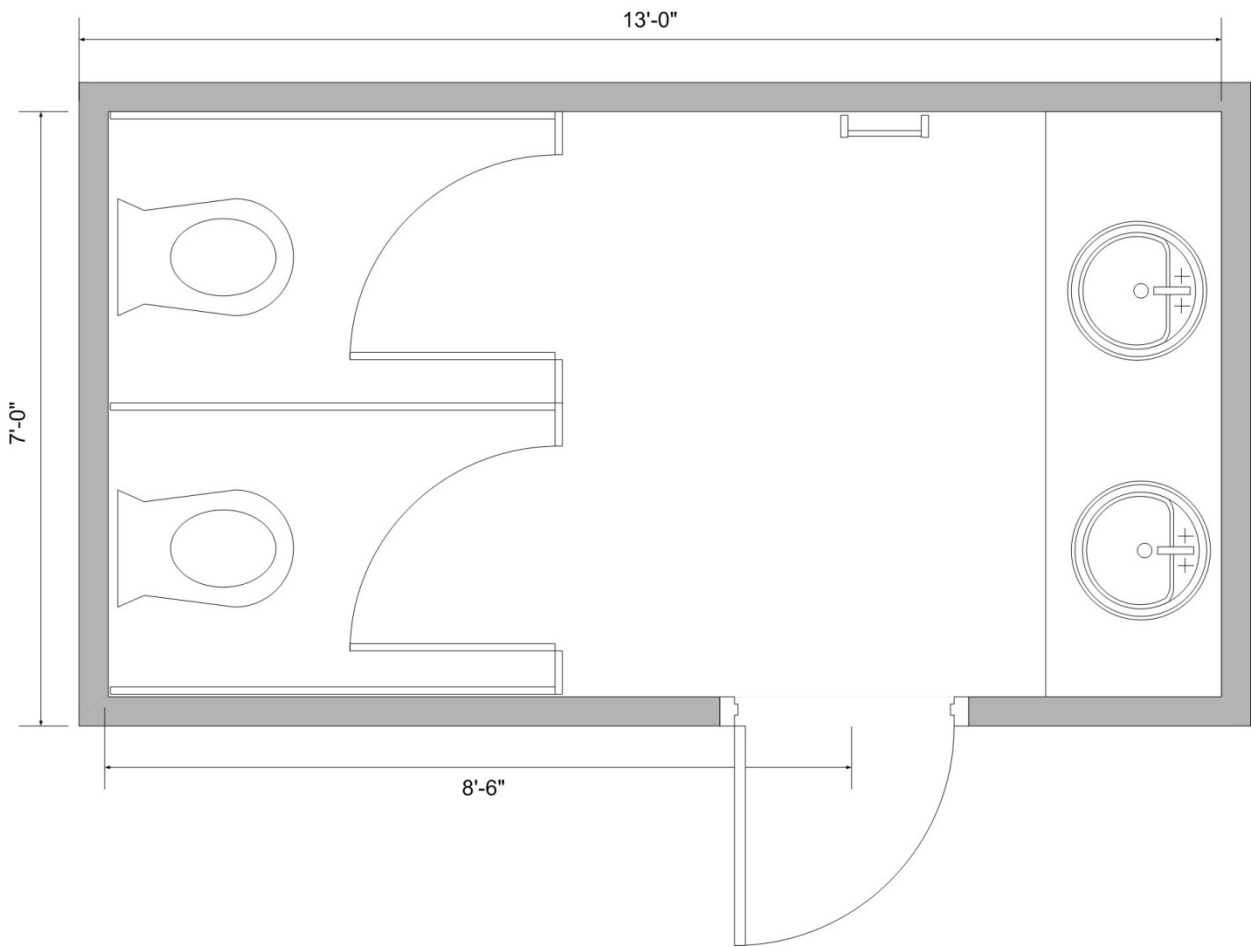
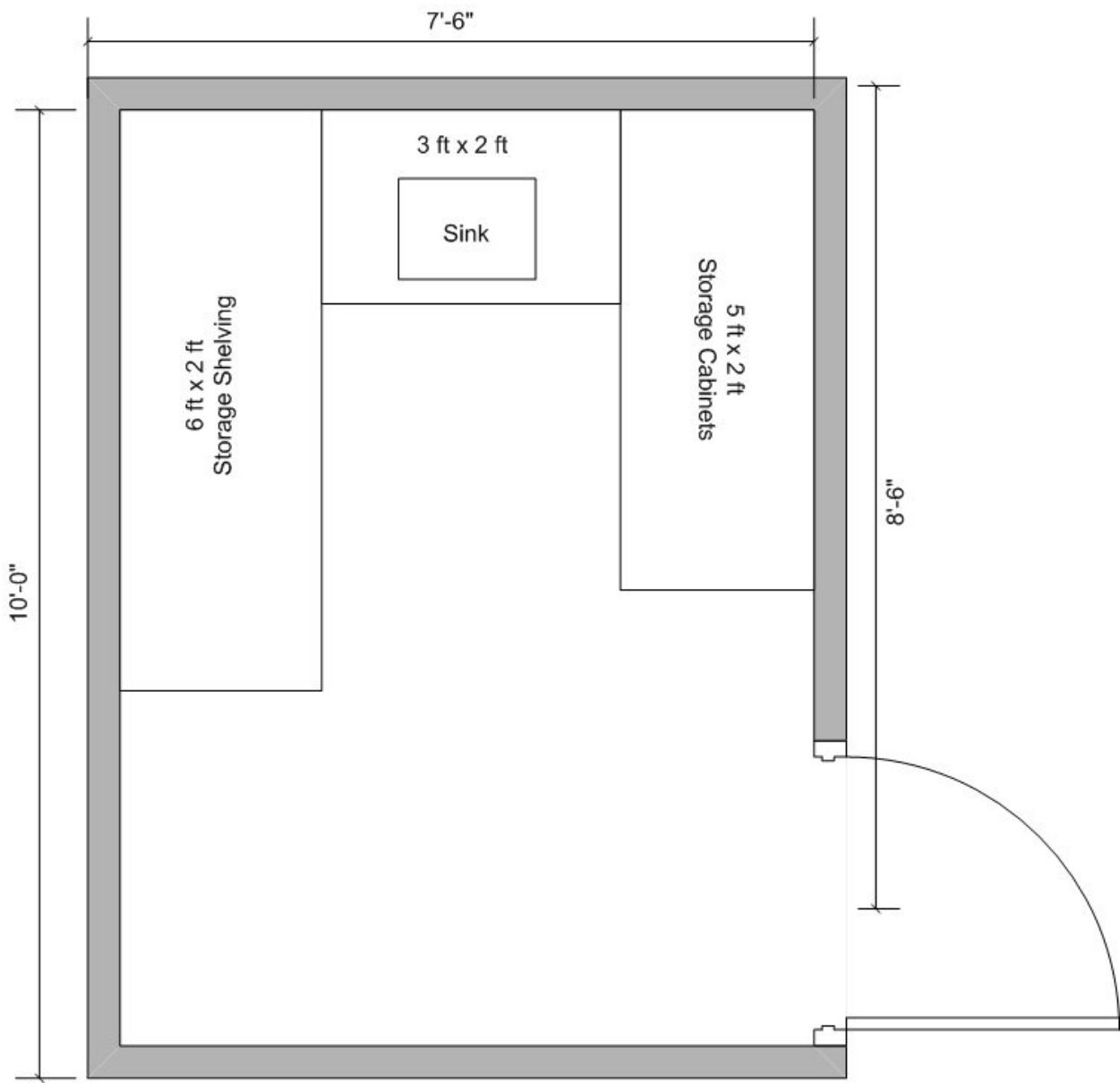


Figure #4 Janitors Closet



# Appendix D: Finances

Figure # 1 – Assumptions

Assumptions					Net Present Worth:		\$ 194,915	
Sales Price	100.43	per transaction			Internal Rate of Return:		26%	
Material Cost	36.84	per transaction						
Labor Cost	10.23	per transaction			Payback Period:		2.95 years	
Transactions	17500	per year						
MARR	5%							
Facility Size	5456	sq-ft						
Office Rent	\$ 11.00	per sq-ft						
Electricity Cost	\$ 0.16	per kw-hr						
Electricity Use	32040	kw-hr/year						
Equipment Cost	\$ 71,333							
Production					Investments			
Year	% of Max	Units Sold			Description	Cost	Depr. Life	IRS Classification
0	0%	0						
1	50%	8750			Fitting Room	\$ 639	7	34.0
2	100%	17500			Equipment	\$ 3,418	7	37.11
3	100%	17500			Employee Room	\$ 3,609	7	37.11
4	100%	17500			INV/ Checkstand	\$ 12,196	7	37.11
5	100%	17500			Sales Floor	\$ 33,789	7	37.11
6	100%	17500			Maintenance Equipment	\$ 1,219	7	37.11
7	100%	17500			Office Furnishings	\$ 2,793	7	00.11
8	100%	17500			Computers/Copier	\$ 2,740	5	00.13/00.12
					Restroom	\$ 10,931	7	37.11
					Total Investments	\$ 71,333		

Figure #2 – After Tax Cash Flow

Year	BTCF	Inc - Exp	Investments	Depreciation	Taxable Income	Taxes	ATCF	Cum. ATCF	PW @ MARR
0	\$ (71,333)	\$ -	\$ 71,333	\$ -	\$ -	\$ -	\$ (71,333)	\$ (71,333)	\$ (71,333)
1	\$ (336,652)	\$ (336,652)	\$ -	\$ 10,350	\$ (347,002)	\$ -	\$ (336,652)	\$ (407,986)	\$ (320,621)
2	\$ 219,760	\$ 219,760	\$ -	\$ 17,675	\$ (144,917)	\$ (57,967)	\$ 277,727	\$ (130,258)	\$ 251,907
3	\$ 219,760	\$ 219,760	\$ -	\$ 12,523	\$ 207,237	\$ 82,895	\$ 136,865	\$ 6,607	\$ 118,229
4	\$ 219,760	\$ 219,760	\$ -	\$ 8,883	\$ 210,877	\$ 84,351	\$ 135,409	\$ 142,016	\$ 111,402
5	\$ 219,760	\$ 219,760	\$ -	\$ 6,441	\$ 213,319	\$ 85,328	\$ 134,433	\$ 276,449	\$ 105,331
6	\$ 219,760	\$ 219,760	\$ -	\$ 6,276	\$ 213,484	\$ 85,394	\$ 134,367	\$ 410,816	\$ 100,266
7	\$ 219,760	\$ 219,760	\$ -	\$ 6,125	\$ 213,635	\$ 85,454	\$ 134,306	\$ 545,122	\$ 95,449
8	\$ 219,760	\$ 219,760	\$ -	\$ 3,059	\$ 216,701	\$ 86,680	\$ 133,080	\$ 678,202	\$ 90,074
NPW =	\$ 194,915								
IRR =	26%								
Payback =	\$ 2.95 years								



Figure #3 – Before Tax Cash Flow

Year	Income	Expenses	Investments	BTCF	Cum. BTCF	PW @ MARR
0	\$ -	\$ -	\$ 71,333	\$ (71,333)	\$ (71,333)	\$ (71,333)
1	\$ 878,763	\$1,215,415	\$ -	\$ (336,652)	\$ (407,986)	\$ (320,621)
2	\$1,757,525	\$1,537,765	\$ -	\$ 219,760	\$ (188,225)	\$ 199,329
3	\$1,757,525	\$1,537,765	\$ -	\$ 219,760	\$ 31,535	\$ 189,837
4	\$1,757,525	\$1,537,765	\$ -	\$ 219,760	\$ 251,295	\$ 180,797
5	\$1,757,525	\$1,537,765	\$ -	\$ 219,760	\$ 471,055	\$ 172,188
6	\$1,757,525	\$1,537,765	\$ -	\$ 219,760	\$ 690,816	\$ 163,988
7	\$1,757,525	\$1,537,765	\$ -	\$ 219,760	\$ 910,576	\$ 156,180
8	\$1,757,525	\$1,537,765	\$ -	\$ 219,760	\$1,130,336	\$ 148,742
BT IRR =	36%					
Net PW =	\$ 350,197					
Payback =	\$ 2.86 years					

Figure #4 – Income

Year	Sales	Total Income
0	\$ -	\$ -
1	\$ 878,763	\$ 878,763
2	\$ 1,757,525	\$ 1,757,525
3	\$ 1,757,525	\$ 1,757,525
4	\$ 1,757,525	\$ 1,757,525
5	\$ 1,757,525	\$ 1,757,525
6	\$ 1,757,525	\$ 1,757,525
7	\$ 1,757,525	\$ 1,757,525
8	\$ 1,757,525	\$ 1,757,525

Figure #5 – Expenses

Year	Labor Wages	Electricity	Rent	Parts	Total Expenses
0	\$ -	\$ -	\$ -	\$ -	\$ -
1	\$ 167,746	\$ 5,126	\$ 720,192	\$ 322,350	\$ 1,215,415
2	\$ 167,746	\$ 5,126	\$ 720,192	\$ 644,700	\$ 1,537,765
3	\$ 167,746	\$ 5,126	\$ 720,192	\$ 644,700	\$ 1,537,765
4	\$ 167,746	\$ 5,126	\$ 720,192	\$ 644,700	\$ 1,537,765
5	\$ 167,746	\$ 5,126	\$ 720,192	\$ 644,700	\$ 1,537,765
6	\$ 167,746	\$ 5,126	\$ 720,192	\$ 644,700	\$ 1,537,765
7	\$ 167,746	\$ 5,126	\$ 720,192	\$ 644,700	\$ 1,537,765
8	\$ 167,746	\$ 5,126	\$ 720,192	\$ 644,700	\$ 1,537,765

Figure #6 – Wages

Wages	* FUTA only on first \$7000 SUT only on first \$10,800									
Labor Wages										
Position	Wage	FICA	Medicare	FUTA	SUT	ETT	Workers Comp	Yearly Wages	Employees	Total Yearly Wages
Manager	\$ 20	6.20%	1.45%	0.80%	1.50%	0.10%	4.50%	\$ 39,008	1	\$ 39,008
Asst. Manager	\$ 14	6.20%	1.45%	0.80%	1.50%	0.10%	1.50%	\$ 26,617	2	\$ 53,234
Sales Reps	\$ 8.5	6.20%	1.45%	0.80%	1.50%	0.10%	1.50%	\$ 15,101	5	\$ 75,505
								Total Labor Wages		\$ 167,746

Figure #7 – Depreciation

7-Year MACRS	Fitting Room	Equipment	Employee Room	INV/ Checkstand	Sales Floor	Maintenance Equipment	Office Furnishings	Computers/ Copier	Restroom	Total Depreciation
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14.29%	\$ 91	\$ 488	\$ 516	\$ 1,743	\$ 4,828	\$ 174	\$ 399	\$ 548	\$ 1,562	\$ 10,350
24.49%	\$ 156	\$ 837	\$ 884	\$ 2,987	\$ 8,275	\$ 299	\$ 684	\$ 877	\$ 2,677	\$ 17,675
17.49%	\$ 112	\$ 598	\$ 631	\$ 2,133	\$ 5,910	\$ 213	\$ 488	\$ 526	\$ 1,912	\$ 12,523
12.49%	\$ 80	\$ 427	\$ 451	\$ 1,523	\$ 4,220	\$ 152	\$ 349	\$ 316	\$ 1,365	\$ 8,883
8.93%	\$ 57	\$ 305	\$ 322	\$ 1,089	\$ 3,017	\$ 109	\$ 249	\$ 316	\$ 976	\$ 6,441
8.92%	\$ 57	\$ 305	\$ 322	\$ 1,088	\$ 3,014	\$ 109	\$ 249	\$ 158	\$ 975	\$ 6,276
8.93%	\$ 57	\$ 305	\$ 322	\$ 1,089	\$ 3,017	\$ 109	\$ 249	\$ -	\$ 976	\$ 6,125
4.46%	\$ 28	\$ 152	\$ 161	\$ 544	\$ 1,507	\$ 54	\$ 125	\$ -	\$ 488	\$ 3,059

Figure #8 – Furnishing Costs

<b>Office</b>						
	<b>Item Description</b>	<b>Item Qty.</b>	<b>Per. Unit Price</b>	<b>Total Price</b>	<b>Supplier</b>	<b>Cat/ Part #</b>
	Desktop computer	2	\$ 999.99	\$ 1,999.98	Dell	XPS 9100
	Printer/Copier/Fax	1	\$ 739.99	\$ 739.99	Dell	311CN
	Desk Chair	2	\$ 239.00	\$ 478.00	officefurniture	RMT-MT9400
	Shelves	1	\$ 417.00	\$ 417.00	green-furniture	TWAO-110
	Desks	2	\$ 574.00	\$ 1,148.00	green-furniture	CDAO-120
	Filing Cabinets	4	\$ 62.00	\$ 248.00	green-furniture	FCAO-120
	Industrial Carpet	154	\$1.96/Sq. Ft.	\$ 301.84	GreenFloors	GFCCSHWADVDAY07
	Telephone	2	\$ 99.99	\$ 199.98	Staples	KX-TS3282B
			<b>Total =</b>	<b>\$ 5,532.79</b>		
			Printer/Copier =	\$ 2,739.97		
			Office Furnishings =	\$ 2,792.82		
<b>Restroom</b>						
	<b>Item Description</b>	<b>Item Qty.</b>	<b>Per. Unit Price</b>	<b>Total Price</b>	<b>Supplier</b>	<b>Cat/ Part #</b>
	Toilets	3	\$ 2,329.00	\$ 6,987.00	envirolet	120VAC Electric
	Urinal	1	\$ 430.78	\$ 430.78	SloanPlumbingParts	WES-1000
	Wall Mounted Sinks	3	\$ 340.00	\$ 1,020.00	Silkeborg	SS- VVBB-422V
	Partitions	3	\$ 416.00	\$ 1,248.00	allpartitions	n/a
	Soap Dispenser	2	\$ 30.99	\$ 61.98	eofficedirect	GOJ274012
	Air Dryer	2	\$ 395.00	\$ 790.00	prorerooms	EXT2-M
	Toilet Paper Dispenser	3	\$ 75.00	\$ 225.00	uline	H-2546
	Flooring	181	\$93 /Sq.Ft	\$ 168.33	GreenFloors	GFCTNINENDDEE64
	Grab bar	2	\$ 30.00	\$ 60.00		na
			<b>Total =</b>	<b>\$10,991.09</b>		
<b>Janitorial</b>						
	<b>Item Description</b>	<b>Item Qty.</b>	<b>Per. Unit Price</b>	<b>Total Price</b>	<b>Supplier</b>	<b>Cat/ Part #</b>
	6' x 2' Rack	1	\$ 249.00	\$ 249.00	uline	H-1752-54
	5' x 2' Rack	1	\$ 199.00	\$ 199.00	uline	H-1751-54
	Janitor Sink	1	\$ 399.99	\$ 399.99	webrestarauntstore	1094136
	Flooring	76	\$93 /Sq.Ft	\$ 70.68	GreenFloors	GFCTNINENDBRI62
	Vacuum	1	\$ 299.99	\$ 299.99	Oreck	U3800HHPK
			<b>Total =</b>	<b>\$ 1,218.66</b>		
<b>Sales Floor</b>						
	<b>Item Description</b>	<b>Item Qty.</b>	<b>Per. Unit Price</b>	<b>Total Price</b>	<b>Supplier</b>	<b>Cat/ Part #</b>
	9' x 9' Round Table	2	\$ 2,448.00	\$ 4,896.00	homegallerystores	754-11-38
	4' x 6' Tables	8	\$ 369.00	\$ 2,952.00	ericsooutdoorfurniture	n/a
	4' x 4' Round Rack	5	\$ 77.99	\$ 389.95	storefixture supply	00-004CH
	3' x 7' Rack	3	\$ 340.00	\$ 1,020.00	barrrdisplay	2879
	10' x 2.5' Rack (2 - 5'x 2.5' racks)	2	\$ 73.98	\$ 147.96	storefixture supply	01-003CH
	3' x 7' Rack	3	\$ 225.00	\$ 675.00	barrrdisplay	2887
	14" x 14" cubes	6	\$ 499.99	\$ 2,999.94	inmod	zipper-cube
	Slatwall	40	\$ 155.00	\$ 6,200.00	barrrdisplay	2848
	Flooring	3720	\$ 3.90	\$ 14,508.00	GreenFloors	GFCEBGFHORNIAT36
			<b>Total =</b>	<b>\$ 33,788.85</b>		
<b>INV/Checkstand</b>						
	<b>Item Description</b>	<b>Item Qty.</b>	<b>Per. Unit Price</b>	<b>Total Price</b>	<b>Supplier</b>	<b>Cat/ Part #</b>
	computers	3	\$ 999.99	\$ 2,999.97	Dell	XPS 9100
	item scanner	3	\$ 736.40	\$ 2,209.20	mbcestore	HS12-1000
	Telephone	2	\$ 99.99	\$ 199.98	Staples	KX-TS3282B
	File Cabinet	2	\$ 129.99	\$ 259.98	office depot	422357
	7' x 3' Inventory Shelving	10	\$ 240.00	\$ 2,400.00	uline	H-1533
	Inv. Flooring	868	\$ 4.50	\$ 3,906.00	GreenFloors	GFCEFCFNTILCEP08
	General Use First Aid Kit	1	\$ 51.20	\$51.20	Grainger	2201
	Class 80-BC Fire Extinguisher	2	\$84.95	\$169.90	Safety Media Inc	EX02
			<b>Total =</b>	<b>\$ 12,196.23</b>		
<b>Employee Room</b>						
	<b>Item Description</b>	<b>Item Qty.</b>	<b>Per. Unit Price</b>	<b>Total Price</b>	<b>Supplier</b>	<b>Cat/ Part #</b>
	Lockers	2	\$ 630.80	\$ 1,261.60	Sproutz	4696JC34"
	Table & 4 Chairs	1	\$ 1,248.07	\$ 1,248.07	ivgstores	int-D351-48V-set
	Fridge	1	\$ 1,099.00	\$ 1,099.00	HomeDepot	GSL25JFXLB
			<b>Total =</b>	<b>\$ 3,608.67</b>		
<b>Equipment</b>						
	<b>Item Description</b>	<b>Item Qty.</b>	<b>Per. Unit Price</b>	<b>Total Price</b>	<b>Supplier</b>	<b>Cat/ Part #</b>
	Step-Stool	1	\$ 630.80	\$ 265.00	uline	H-1082
	Rolling Cart	2	\$ 94.95	\$ 189.90	globalindustrial	T9AB393344
	Exterior Trash bin	1	\$ 1,666.00	\$ 1,666.00	trashcansource	T324-1059
	Interior trash bins	4	\$ 324.38	\$ 1,297.52	trashcansource	T144-1827
			<b>Total =</b>	<b>\$ 3,418.42</b>		
<b>Fitting Room</b>						
	<b>Item Description</b>	<b>Item Qty.</b>	<b>Per. Unit Price</b>	<b>Total Price</b>	<b>Supplier</b>	<b>Cat/ Part #</b>
	Curtain Wall	6	\$ 99.00	\$ 265.00	rawganique	n/a
	Curtain Rail	6	\$ 26.40	\$ 158.40	HomeDepot	el HD9484
	Curtain Hooks	6	\$ 18.00	\$ 108.00	rawganique	n/a
	Clothe Hook	12	\$ 8.99	\$ 107.88	Organize	318865390
			<b>Total =</b>	<b>\$ 639.28</b>		

Figure #9 – Energy Climate

Commercial and Industrial Demand

Electric Design Manual

for selected businesses with average peak demands less than 150 kVA has been compiled and is shown in [Table 4-2](#) on Page 4-5.

To find existing demand information for larger loads, use the customer care and billing (CC&B) records, Distribution Asset Reconciliation Tool (DART) data, 300 kW loading reports, and the “Business Service Employee Tools” website:  
[https://www.intra.comp.nge.com/porta/bizportal/employee/home/?\\_requestid=35290](https://www.intra.comp.nge.com/porta/bizportal/employee/home/?_requestid=35290).  
Also, local offices serving customers with similar power needs may be able to provide information.

**Table 4-1 Climate Zones for Residential and Commercial/Industrial Demand Estimation**  
(For convenience, this table is duplicated in Chapter 6, “Residential Demand.”)

Area	Division	Climate Zone	Description
Area 1	Peninsula	T	West of I-280 and north of Hwy. 92; Skyline Blvd. and west; north of San Francisco Intl. Airport and I-380; west of I-280.
		X	All others.
	San Francisco	T	
Area 2	East Bay	X	North and east of Pinole; east of crest on East Bay hills.
		T	All others.
	Diablo	S	Central Valley and Delta portions east of Port Chicago.
	Mission	X	All others.
Area 3	Central Coast	T	Santa Cruz District and the area north of Blue Rock Mountain to Palo Corona Summit line. West of Palo Corona Summit to Cone Peak line, extended to the division boundary.
		X	All others.
	De Anza	X	
	San Jose	S	Area east of San Jose/DeAnza division boundary line, east of Hwy. 17, south of the 280 and 680 freeways, and south of Alum Rock Ave. east of the 680 Fwy.
		X	All others
Area 4	Fresno	R	Up to 3,000' elevation.
		(1)	Above 3,000' elevation.
	Kern	R	
	Los Padres	T	Hwy. 1 areas include San Luis Obispo and south along Hwy. 101, Santa Maria and areas north of Los Alamos.
X		All other areas, including Los Alamos south to Buellton and Solvang.	
Area 5	Stockton	S	Up to 3,000' elevation, including Stanislaus.
		(1)	Above 3,000' elevation, including Stanislaus.
	Yosemite	R	Up to 3,000' elevation.
		(1)	Above 3,000' elevation.
Area 6	North Valley	S	Up to 3,000' elevation.
		(1)	Above 3,000' elevation.
	Sacramento	S	

Figure #10 – Energy Type

Table 4-3 Commercial Demand Volt-Amperes per Square Foot by Type of Occupancy

	Occupancy Type	Peak Month Load Factor (%)	Power Factor (%)	Average Peak VA/Sq. Ft. <sup>1</sup>		
				Climate Zones R, S	Climate Zone T	Climate Zone X
1 <sup>1</sup>	Auto Repair	44	85	5.1	5.8	3.9
2	Auto Sales	48	85	3.9	3.2	4.2
3	Building/Hardware/Garden Supply	49	85	5.1	4.5	5.5
4	Clothing/Shoes	42	85	9.2	5.4	7.3
5	Colleges	47	82	6.0	3.8	4.6
6	Department Store, Major	50	89	5.9	5.4	5.8
7	Drug/Liquor	46	93	5.9	5.4	5.9
8 <sup>1</sup>	Fire/Police	60	80	9.3	3.5	6.7
9	Furn./Appliance/Home Electronics	45	85	5.1	5.3	5.5
10	Grocery ≤ 10,000 Sq. Ft.	64	85	Use Method 1 or Table 4-2		
11	Grocery > 10,000 Sq. Ft.	76	80	10.1	9.1	11.0
12	Health Services/Clinics	42	90	9.6	5.1	8.7
13	Hospital	65	80	7.7	5.5	6.2
14	Hotel/Motel	51	86	5.1	2.7	3.5
15 <sup>1</sup>	Jails	62	87	5.8	6.6	2.1
16	Library/Museum	47	87	7.8	4.7	6.4
17 <sup>1</sup>	Movie Theaters	46	85	6.7	3.7	7.3
18	Nursing	55	80	5.6	3.1	3.8
19	Office ≤ 30,000 Sq. Ft.	41	85	Use Method 1 or Figure 4-1		
20	Office > 30,000 Sq. Ft.	46	84	6.1	4.5	5.8
21	Outdoor Business	48	85	3.6	4.1	3.5
22	Post Office	53	82	6.3	3.8	4.9
23	Recreation (Dance Studio, Bowling)	46	85	6.6	3.9	6.3
24	Religious Institutions	31	80	4.7	1.9	3.4
25	Restaurants ≤ 3,000 Sq. Ft.	49	85	Use Method 1 or Table 4-2		
26	Restaurants > 3,000 Sq. Ft.	54	85	12.9	10.2	12.5
27	Schools	28	78	5.7	2.3	3.3
28	Service Organizations	43	85	7.8	3.1	5.1
29	Service Station	60	85	Method 1	Method 1	Method 1
30	Shopping Center	52	84	6.2	5.3	5.8
31	Specialty Shops	44	85	6.2	5.3	6.8
32	Telephone	65	85	9.6	3.7	9.3
33	Trailer Park	Use Residential Load Estimation Technique				
34 <sup>1</sup>	Transport (Bus, Truck Depots)	46	80	6.0	3.0	5.4
35	Warehouse	46	82	3.5	2.5	3.8
36	Warehouse, Refrigerated	56	78	9.8	5.8	8.3

<sup>1</sup> Averages for all climate zones.

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